Cumulative Index 1982, 1983, and 1984
Volumes 13, 14, and 15

Note: The year is in *italic* type. Page numbers of symposia and articles are in **boldface** type.

SYMPOSIA

1982

January	TOTAL KNEE ARTHROPLASTY
April	ARTHROSCOPIC KNEE SURGERY
July	OFFICE ORTHOPEDIC PRACTICE
October	SURFACE REPLACEMENT ARTHROPLASTY OF THE HIP

1983

January	ORTHOPEDIC RADIOLOGY
April	SPECIAL CONSIDERATIONS IN SPORTS MEDICINE
July	EVALUATION AND CARE OF LUMBAR SPINE PROBLEMS
October	REHABILITATION AFTER RECONSTRUCTIVE HAND SURGERY

1984

January	ELECTRICALLY INDUCED OSTEOGENESIS
April	THE WRIST
July	MUSCULOSKELETAL SEPSIS
October	METABOLIC BONE DISEASE

Abductor hallucis longus muscle, flap of, for soft tissue defects of foot, *1984*: July, 448
Abrasion, extensor mechanism loss caused by, *1983*: Oct., 825–826
Absorptiometry, dual-photon, for diagnosis of osteoporosis, *1984*: Oct., 722–723
for measurement of bone density, *1984*: Oct., 645, 646
single-photon, for measurement of bone density, *1984*: Oct., 645
Accessory tarsal navicular, in child, *1982*: July, 651–652
Acetabulum, preparation of, in surface replacement arthroplasty, *1982*: Oct., 755–756
Acromioclavicular joint, articular disorders of, *1983*: Jan., 94
post-traumatic osteolysis of, *1983*: Jan., 94–95

Acromioclavicular joint *(Continued)*
subluxation and dislocation of, *1983*: Jan., 93
Actinomycosis, *1983*: Jan., 31
Adhesive capsulitis, of glenohumeral joint, *1983*: Jan., 92–93
of shoulder, arthrography of, *1983*: Jan., 210
Adolescent, athlete, physical conditioning of, *1982*: July, **525–540**
Aerobic metabolism, *1983*: April, 461
Allen test, *1982*: July, 491–492
Allis test, *1982*: July, 611
Aluminum intoxication, from hemodialysis, development of bone disease and, *1984*: Oct., 693–695
Aminoglycosides, for orthopedic infections, *1984*: July, 555–557
Amputation, of fingertip, treatment of, *1983*: Oct., 680–683
of hand, rehabilitation after, *1983*: Oct., **851–872**
of index finger, *1983*: Oct., 861–862
of little finger, *1983*: Oct., 862
of lower extremity, problems of patients with, *1982*: July, **569–578**
Anabolic steroids, use in weight gaining diet condemned, *1983*: April, 394
Anaerobic metabolism, *1983*: April, 461
Analgesics, after replantation surgery, *1983*: Oct., 883
Anametric total knee arthroplasty, *1982*: Jan., **45–54**
Anaphylaxis, as complication of chemonucleolysis, control of, *1983*: July, 614–616
Anesthesia, in free-standing surgical center, *1982*: April, 277–280
Anesthetics, injection of, in evaluation of chronic wrist pain, *1984*: April, 191
Angiography, of skeletal disease, *1983*: Jan., **257–270**
Ankle, arthroplasty of, total, infected, management of, *1984*: July, 499–500
arthroscopy of, *1982*: April, 420
for removal of loose body, *1982*: April, 327–328
foot and, overuse injuries of, in child, *1983*: April, 356–358
nonunion of, *1984*: Jan., 121
soft tissue defects of, muscle flaps for, *1984*: July, 447–448
Ankle replacement, radiography of, *1983*: Jan., 189
Ankylosing spondylitis, *1983*: Jan., 140–142
Annulus fibrosus. See also *Disc*.
degeneration of, *1983*: July, 494–495
tears of, healing of, *1983*: July, 641, 643
Anorexia, in athlete, *1983*: April, 388–389
Anterior cruciate ligament, rupture of, arthroscopy in, *1982*: April, 418
Anterior drawer test, *1982*: July, 505, 507
Antibiotics. See also *Antimicrobial agents* and *Antimicrobial therapy*.
after amputation, *1983*: Oct., 882–883
distribution of, in normal and osteomyelitic bone, *1984*: July, **537–546**
capillary dynamics in, *1984*: July, 540–542
in TARA hip replacement surgery, *1982*: Oct., 885
prophylactic, in knee arthroplasty, *1982*: Jan., 248–249
in musculoskeletal surgery, *1984*: July, 562
Anticoagulants, after replantation, *1983*: Oct., 883
in hip replacement surgery, *1982*: Oct., 885
Antimicrobial agents. See also *Antimicrobial therapy* and *Antibiotics*.
resistance to, emerging patterns of, *1984*: July, **417–425**
genetic basis and mechanisms of, *1984*: July, 418
Antimicrobial therapy. See also *Antimicrobial agents* and *Antibiotics*.
in musculoskeletal surgery, *1984*: July, **547–564**
selection of, *1984*: July, 549–558
laboratory studies in, *1984*: July, 548–549
in orthopedic infections, selection of, *1984*: July, 549–558
Apley test, *1982*: July, 508
Apophysitis, of os calcis, *1983*: April, 356–357
Apprehension test, for shoulder pain, *1982*: July, 458–459
Arm. See *Upper extremity*.
Artery, ulnar, thrombosis of, due to wrist injury, *1984*: April, 283–284
Arthritis, degenerative, after metacarpal injury, *1984*: April, 265–266
of carpus, *1984*: April, **337–353**
triscaphe, *1984*: April, 337, 348–351
SLAC wrist and, *1984*: April, 337–338, 351, 352
inflammatory, of wrist, *1983*: Jan., 200
in Paget's disease, *1983*: Jan., 8; *1984*: Oct., 751–752
treatment of, *1984*: Oct., 760–762
of knee, radionuclide bone scanning of, *1982*: Jan., 227
rheumatoid, in carpometacarpal joints, *1984*: April, 267–268
of thumb carpometacarpal joint, *1984*: April, 275
of wrist, severe, approach to, *1984*: April, **369–380**
septic, anaerobic, after surgical treatment of traumatic injury, *1984*: July, 512–514
anaerobic osteomyelitis and, *1984*: July, **505–516**

Arthritis, septic *(Continued)*
as complication of musculoskeletal surgery, *1984*: July, 511–512
diagnosis and management of, *1984*: July, 510–515
in chronic debilitating disease, *1984*: July, 514–515
common microorganisms in, antibiotic treatment of, *1984*: July, 560–561
of sternoclavicular joint, *1983*: Jan., 96
Arthrodesis. See also *Fusion*.
anterior lumbar, exercises following, *1983*: July, 657
instructions to patient following, *1983*: July, 656–657
failed, appendicular, PEMFs for, *1984*: Jan., 81–83
spinal, PEMFs for, *1984*: Jan., 83–84
for chronic low back pain, *1983*: July, **639–647**
for infected total joint arthroplasty, *1984*: July, 496
for lunatotriquetral ligament tears, *1984*: April, 206
for triquetrolunate instability, *1984*: April, 312–313
intercarpal, for Kienböck's disease, *1984*: April, 364
of knee, after failed arthroplasty, *1982*: Jan., **213–224**
posterior lumbar, exercises following, *1983*: July, 655
instructions to patients following, *1983*: July, 655
triquetrohamate, *1984*: April, 333
for midcarpal instability, *1984*: April, 315–316
triscaphe, *1984*: April, 348–351
Arthrography, for evaluation of chronic wrist pain, *1984*: April, 189
for evaluation of distal radioulnar joint, *1984*: April, 326, 328, 329
for evaluation of painful injured wrist, *1984*: April, 298, 305
in knee arthroplasty, *1982*: Jan., 238
of bucket handle tear, *1982*: April, 340
of total hip replacement, *1983*: Jan., 178–179, 181
of total knee replacement, *1983*: Jan., 185
of wrist and shoulder, *1983*: Jan., **193–215**
Arthroplasty, flexible implant, for rheumatoid wrist disease, *1984*: April, 377–379
for osteoarthritis of thumb carpometacarpal joint, *1984*: April, 272–275
of knee. See *Knee arthroplasty*.
silicone replacement, for Kienböck's disease, *1984*: April, 362–363
surface replacement. See *Surface replacement arthroplasty*.
total ankle, infected, management of, *1984*: July, 499–500
Arthroplasty *(Continued)*
total elbow, infected, management of, *1984*: July, 500–501
total hip, for arthritis in Paget's disease, *1984*: Oct., 760–762
for Gaucher's disease in adults, *1984*: Oct., 770–773
infected, management of, *1984*: July, 496–499
total joint, infected, antibiotic treatment of, *1984*: July, 561
diagnosis of, *1984*: July, 494–495
management of, *1984*: July, **491–504**
prevention of, *1984*: July, 501
total shoulder, infected, management of, *1984*: July, 500
total wrist, infected, management of, *1984*: July, 501
Arthroscopy, in evaluation of chronic wrist pain, *1984*: April, 191
operative, advantages and disadvantages of, *1982*: April, 345
equipping room for, *1982*: April, 285–288
for patellar problems, *1982*: April, **407–413**
for removal of loose bodies, *1982*: April, **313–328**
gas versus fluid medium for, *1982*: April, **293–298**
in free-standing outpatient surgical center, *1982*: April, **277–282**
in sports medicine practice, *1982*: April, **415–421**
instruments for, development of, *1982*: April, **263–276**
in patellar tendon technique, *1982*: April, 355–356
of knee, exposure for, *1982*: April, 289–290
preparation of patient for, *1982*: April, 288–289
symposium on, *1982*: April, **253–454**
principles of triangulation in, *1982*: April, **329–336**
proper environment for, *1982*: April, **283–292**
teaching at residency level, *1982*: April, **255–261**
Swedish System of, *1982*: April, **349–362**
Arthrosis, after scaphoid bone grafting, *1984*: April, 388–389
Aspiration, of joints, in evaluation of chronic wrist pain, *1984*: April, 190–191
Aspirin, after replantation, *1983*: Oct., 883
Athlete. See also *Sports medicine*.
adolescent, physical conditioning of, *1982*: July, **525–540**
child, overuse injuries in, *1983*: April, 337–360

Athlete-physician relationship, interpersonal characteristics affecting, *1983*: April, 374–375
Athletic competition, presence of physician at, *1983*: April, 328–330
Athletic field, treatment of players on, *1983*: April, 333–336
Attention control training, *1983*: April, 384
Autografts, after burns, *1983*: Oct., 703–704
Auto traction, *1982*: July, 429
Avascular bone, nonunion in, implantable direct current for, *1984*: Jan., 53
Avascular necrosis, as complication of intercarpal dislocations and fracture-dislocations, *1984*: April, 254, 255
  nonunion and, in scaphoid fractures, *1984*: April, **381–391**
  of femoral head, after surface replacement arthroplasty, *1982*: Oct., 762–763, 765
    after Wagner surface replacement arthroplasty, *1982*: Oct., 794–795
    electrical stimulation in treatment of, early results in, *1984*: Jan., **163–175**
    in Gaucher's disease in children, *1984*: Oct., 769–770
  of lunate, *1984*: April, 355–367
  of scaphoid, *1984*: April, 390
  of tarsal navicular, in child, *1982*: July, 648
  segmental, surface replacement arthroplasty in, *1982*: Oct., 735
Axonotmesis, *1982*: July, 478

Bacilli, gram-negative, with inducible β-lactamases, antimicrobial resistance and, *1984*: July, 422–423
Back. See *Low back*, *Spine*, or *Spine, lumbar*.
Back pain, in child, *1982*: July, **587–604**
  low. See *Low back, pain in*.
  radiographic studies of, *1983*: Jan., **119–145**
Back school, *1982*: July, 431, 434
Bacteria, anaerobic, antimicrobial resistance and, *1984*: July, 422
    collection and transport and susceptibility studies of, *1984*: July, 506–507
    pathologic role of in musculoskeletal system, *1984*: July, 505–506
  colonization of, on biomaterials and compromised tissue, *1984*: July, 517–530
Bacterial adherence, glycocalyx and, role of in musculoskeletal infection, *1984*: July, **517–535**
Bacterial glycocalyx, bacterial adherence and, role of in musculoskeletal infection, *1984*: July, **517–535**
  probable synthesis and function of, *1984*: July, 520
Barlow splint, *1982*: July, 607, 609
Barlow test, *1982*: July, 610, 613
Barrel-vault osteotomy, of knee, technique for, *1982*: Jan., 7–13
Basketball, strength training for, *1983*: April, 442
Basket forceps, for arthroscopic surgery, *1982*: April, 391
Bennett's fracture, treatment of, *1984*: April, 268–270
Biofeedback, *1982*: July, 585
  for athletic injury, *1983*: April, 383–384
  for low back pain, *1983*: July, 633
Biomaterials, susceptibility of adjacent tissue to infection and, *1984*: July, 517–518
Biomechanics, of knee rehabilitation, *1983*: April, **397–402**
  of surface replacement arthroplasty of hip, *1982*: Oct., **681–707**
Biopsy, bone. See *Bone biopsy*.
  percutaneous musculoskeletal, radiologically guided, *1983*: Jan., **233–241**
Blastomycosis, *1983*: Jan., 31
Blood chemistries, for metabolic bone disease, *1984*: Oct., 653, 665
Blount's disease, *1983*: Jan., 106–108
Body fat, as percentage of body weight in athletes, *1983*: April, 392–394
Bone(s), bioelectrical properties of, *1984*: Jan., **3–14**
  biopsy of. See *Bone biopsy*.
  cells in, *1984*: Oct., 599–600
  classification of, *1984*: Oct., 598–599
  collagen in, *1984*: Oct., 602–604
  composition of, *1984*: Oct., 599–606
  cortical. See *Cortical bone*.
  defects of, infected, open cancellous bone grafting for, *1984*: July, **427–440**
  destruction of, patterns of, *1983*: Jan., 40–43
  electrical potentials in, *1984*: Jan., 12
  growth plate of. See *Growth plate*.
  juxtaposed, conditions demonstrating, *1984*: Oct., 620
  lesions of, solitary, radiography of, *1983*: Jan., **39–64**
  loss of. See *Osteoporosis*.
  mineralization front of, evaluation by light microscopy, for metabolic bone disease, *1984*: Oct., 618
  mineralization of, *1984*: Oct., 606–609
  mineral of, *1984*: Oct., 601–602
  noncollagenous protein in, *1984*: Oct., 604–606
  normal and osteomyelitic, antibiotic distribution in, *1984*: July, **537–546**
  remodeling of, functions of, *1984*: Oct., 597, 598
  structure of, *1984*: Oct., 597–599
    and composition and mineralization of, *1984*: Oct., **597–612**
  trabecular. See *Trabecular bone*.

Bone(s) *(Continued)*
tumor of. See *Tumor, bone.*
volume of, decreased. See *Osteoporosis.*
woven, on light microscopy, *1984*: Oct., 618, 619
Bone biopsy, role of, *1984*: Oct., 615–617
transiliac, for diagnosis of osteoporosis, *1984*: Oct., 720, 722
Bone density, decreased. See *Osteopenia.*
measurement of, qualitative methods for, *1984*: Oct., 632–644
quantitative methods for, *1984*: Oct., 644–648
Bone disease, development of, aluminum intoxication from hemodialysis and, *1984*: Oct., 693–695
histologic manifestations of, in renal disease, *1984*: Oct., 692–693
in renal insufficiency and hemodialysis, *1984*: Oct., 687–695
metabolic. See *Metabolic bone disease.*
Bone graft(s), cancellous, failure of, implantable direct current for, *1984*: Jan., 54
for congenital pseudarthrosis, *1984*: Jan., 148–149
for infected nonunion of femur and tibia, *1984*: July, 484, 485, 488
for scaphoid nonunion, *1984*: April, 383–389
free vascularized, angiography in, *1983*: Jan., 257, 259
for long bone nonunion, *1984*: Jan., 131–142
sources and characteristics of, *1984*: Jan., 135
technique for, *1984*: Jan., 135–137
open cancellous, of infected bone defects, *1984*: July, **427–440**
bony deficiency after, *1984*: July, 433
cutaneous insufficiency after, *1984*: July, 435
follow-up after, *1984*: July, 432–435
technique for, *1984*: July, 428–433
role of in treatment of nonunion, *1984*: Jan., **113–123**
technique of, *1984*: Jan., 114–115
use of with PEMF treatment, *1984*: Jan., 80
vascularized, advantages of, *1984*: Jan., 132–133
Bone growth stimulator, implantable, *1984*: Jan., **47–59**
Bone histomorphometry, vertebral fracture incidence and, effects of osteoporosis treatment with sodium fluoride and calcium on, *1984*: Oct., **729–745**
Bone infarction, osteomyelitis versus, in children, scintigraphic differentiation of, *1984*: July, 408
Bone islands, *1983*: Jan., 135–137
Bone matrix, extracellular, *1984*: Oct., **600–606**
Bone pain, in Gaucher's disease, *1984*: Oct., 769
in Paget's disease, *1984*: Oct., 751–752
Bone resorption, in hyperparathyroidism, *1984*: Oct., 701–702
subperiosteal, in hyperparathyroidism, *1984*: Oct., 637–638
Bone scan(s), for evaluation of distal radioulnar joint, *1984*: April, 328, 329
for evaluation of painful injured wrist, *1984*: April, 299
for low back conditions, *1983*: July, 523
in osteomyelitis, *1983*: Jan., 35
in surface replacement arthroplasty of hip, *1982*: Oct., 780–782
three-phase technetium, for musculoskeletal sepsis, utilization and interpretation of, *1984*: July, 404–405
Bone scintigraphy, *1983*: Jan., **243–256**
in evaluation of chronic wrist pain, *1984*: April, 189
in evaluation of neck pain, *1982*: July, 441, 448–449
in Legg-Perthes disease, *1983*: Jan., 248
Bone segment transfers, vascularized, donor sites for, *1984*: July, 461–463
for chronic osteomyelitis, *1984*: July, **461–472**
indications for, *1984*: July, 464
results with, *1984*: July, 464–471
Boutonniere deformity, *1983*: Oct., 815–819
Bracing, for osteogenesis imperfecta, *1984*: Oct., 785, 786
Brodie's abscess, *1983*: Jan., 28
Brucellosis, *1983*: Jan., 31
Bucket handle meniscal tear, excision of, *1982*: April, **337–348; 369–385**
with three-puncture technique, *1982*: April, 359
Buddy-taping, *1983*: Oct., 801
Bunions, in children, *1982*: July, 653
Burns, acute thermal, depth assessment of, *1983*: Oct., 700
composite, of finger, *1983*: Oct., 711, 713
of upper extremity, rehabilitation after, *1983*: Oct., **699–718**
Bursitis, in child, *1983*: April, 346

Caffey's sign, *1982*: July, 621
Calcaneovalgus, in child, *1982*: July, 646
Calcar femorale, *1982*: Oct., 668, 670
Calcific periarthritis, of glenohumeral joint, *1983*: Jan., 89–90
Calcification, associated with tendinitis in hand, *1982*: July, 487

Calcification *(Continued)*
of intervertebral discs, in child, *1982*: July, 596
Calcitonin, in Paget's disease, *1983*: Jan., 16; *1984*: Oct., 759–760
measurement of, for diagnosis of metabolic bone disease, *1984*: Oct., 660
Calcium, regulation of, and hormonal activity, *1984*: Oct., 697–699
replacement of, for osteoporosis, *1984*: Oct., 723
sodium fluoride and, for osteoporosis, effects of on vertebral fracture incidence and bone histomorphometry, *1984*: Oct., 729–745
Callus, formation of during fracture healing, *1984*: Jan., 18–19
Camper's chiasma, *1983*: Oct., 829, 840
Capacitive electrical stimulation, *1984*: Jan., 16–17
Capener splint, *1983*: Oct., 817, 818
Capitate, in painful injured wrist, examination of, *1984*: April, 292
in SLAC wrist, *1984*: April, 338–341
Capitate-hamate fusion, for Kienböck's disease, *1984*: April, 364
Capitotriquetral ligament, anatomy of, *1984*: April, 209, 210–211
Capsule, finger, chronic problems of, *1983*: Oct., 808–809
Capsulectomy, of proximal interphalangeal joint, *1983*: Oct., 735–737, 739
Capsulotomy, in surface replacement arthroplasty of hip, *1982*: Oct., 749–750
Cardiorespiratory fitness, of handicapped, *1983*: April, 309
Carpal boss, with or without ganglion formation, *1984*: April, 266–267
Carpal instability(ies), accurate evaluation and management of, *1984*: April, **289–306**
demonstration of, during physical examination, *1984*: April, 185
pathogenesis of, wrist ligamentous anatomy and, *1984*: April, **209–216**
treatment of, *1984*: April, 301–305
ulnar, *1984*: April, **307–320**
Carpometacarpal joint(s), *1984*: April, **259–277**
anatomy of, *1984*: April, 259–260
medial four, fractures and fracture-dislocations of, *1984*: April, 261–264
in painful injured wrist, examination of, *1984*: April, 291–292, 293
of thumb, dislocations and fracture-dislocations of, treatment of, *1984*: April, 268–270
in painful injured wrist, examination of, *1984*: April, 291
instability of, treatment of, *1984*: April, 270–271
Carpometacarpal joint(s), of thumb *(Continued)*
osteoarthritis of, treatment of, *1984*: April, 271–275
rheumatoid arthritis in, *1984*: April, 267–268
Carpometacarpal ligaments, *1984*: April, 260
Carpus. See also *Wrist*.
degenerative disorders of, *1984*: April, **337–353**
flexion-extension and, *1984*: April, 202–204
force transmission to, thumb axis and, *1984*: April, 199
fractures of, and dislocations, acute, *1984*: April, **237–258**
roentgenographic characteristics of, *1984*: April, 188
injury to, median nerve injuries and, *1984*: April, 282
instability of. See *Carpal instability(ies)*.
intercalated segment of, dorsal, collapse of, natural history of, *1984*: April, 204–205
instability of, dorsiflexion. See *DISI*.
palmar flexion. See *PISI*.
palmar, collapse of, *1984*: April, 205–206
rotational shift of, concepts governing, *1984*: April, **193–207**
joints of, ligamentous control of motion and, *1984*: April, 193–194
ligaments of, role of, *1984*: April, 199–200
normal alignment in, *1984*: April, 295
radial deviation and, *1984*: April, 200–202
rotational shift of, *1984*: April, 194, 195
ulnar deviation and, *1984*: April, 200–201
Cartilage, articular, electrical potentials in, *1984*: Jan., 11
in growth plate, *1984*: Oct., 574–584, 585–589
of knee, injury to, arthroscopic surgery for, *1982*: April, 408–409
Cell(s), Gaucher, *1984*: Oct., 766
in bone, *1984*: Oct., 599–600
Cellulitis, osteomyelitis versus, scintigraphic differentiation of, *1984*: July, 407–408
Cephalosporins, bone and serum concentrations of, with bioassay techniques, *1984*: July, 539
for orthopedic infections, *1984*: July, 553–555
Cerebral palsy, orthopedic problems in. See specific disabilities and deformities.
Chemonucleolysis, for lumbar disc disease, *1983*: July, **605–622**
instructions for patients following, *1983*: July, 657–658
Children, athletes, overuse injuries in, *1983*: April, **337–360**
back pain in, *1982*: July, **587–604**
bursitis in, *1983*: April, 346
disturbances of bone growth in, *1983*: Jan., 104–108

foot problems in, *1982*: July, **641–654**
Children *(Continued)*
lower extremity of, torsional abnormalities of, *1982*: July, **629–639**
osteochondritis dissecans in, *1982*: July, 650–651
stress fracture in, *1983*: April, 344–345
tendinitis in, *1983*: April, 346
weight training for, *1983*: April, 432
Chondromalacia patellae, arthroscopic surgery for, *1982*: April, 409–410, 416–417
Chronic pain, in upper limb, after crush injury, *1983*: Oct., 731–732
low back. See *Low back, pain in, chronic.*
management of, *1982*: July, 451
Chymopapain, mechanism of action of, *1983*: July, 605–607
Cineradiography, in evaluation of chronic wrist pain, *1984*: April, 190
Clindamycin, for orthopedic infections, *1984*: July, 557
Clockspring splint, *1983*: Oct., 820, 823
Clubfoot, in child, *1982*: July, 647
Coach, athletic, conflicts between child and, *1983*: April, 366–368
Coban wrap, for hand fracture, *1983*: Oct., 788
Cock-up wrist splint, *1983*: Oct., 758
Codman's triangle, *1983*: Jan., 54–55
Collagen, in bone, *1984*: Oct., 602–604
in osteogenesis imperfecta, *1984*: Oct., 776–778, 780
Collateral ligament, relationship of to interphalangeal condyles, *1983*: Oct., 797–798
rupture of, *1982*: April, 418–419
Colles' fracture(s). See *Fracture(s), Colles'.*
Compartment syndromes, of hand, after crush injury, *1983*: Oct., 721–722, 724
Composite burn, of finger, *1983*: Oct., 711, 713
Compression plates, for hand fracture, *1983*: Oct., 784
Compton scattering, for measurement of bone density, *1984*: Oct., 648
Computed tomography. See *CT.*
Computer, use of to analyze stress and strain on bone, *1982*: Oct., 694–700
Congenital pseudarthrosis, bone grafting for, *1984*: Jan., 148–149
internal fixation in, *1984*: Jan., 148
PEMFs for, *1984*: Jan., 84, **143–162**
studies of, *1984*: Jan., 155–157
prognostic classification in, *1984*: Jan., 156
tibial, implantable direct current for, *1984*: Jan., 56–57
Conray, in epidural block, *1983*: July, 557
Contracture, of hand, after friction burn, *1983*: Oct., 707–708
scar, after burn, *1983*: Oct., 708–709
Control column, of wrist, *1984*: April, 198–199
Cortical bone, resorption of, visualization of by microradioscopy, *1984*: Oct., 636
trabecular bone and, *1984*: Oct., 614
Cortical retraining, after digital amputation, *1983*: Oct., 868–869
Cortisol, *1984*: Oct., 698–699
Cortisone, intrathecal injection of, for back pain, *1983*: July, 564
Corynebacteria, antimicrobial resistance and, *1984*: July, 421
Coumadin, prophylactic use in osteotomy, *1982*: Jan., 13
Craig abduction splint, *1982*: July, 607, 610
Craig trephine biopsy set, *1983*: Jan., 235–237
Creeping substitution, in bone grafting, *1984*: Jan., 113, 131
Cross-finger flap, *1983*: Oct., 687–688
Crush injury, of upper limb, management of, *1983*: Oct., **719–747**
Cryptococcosis, *1983*: Jan., 31
CT, for evaluation of chronic wrist pain, *1984*: April, 189–190
for evaluation of distal radioulnar joint, *1984*: April, 326, 328
for herniated lumbar disc, *1983*: July, 523, 546
for low back pain, *1983*: July, 523–524, **539–551**
for measurement of bone density, *1984*: Oct., 645, 647–648
for musculoskeletal tumors, compared with other modalities, *1983*: Jan., 217–218
in osteomyelitis, *1983*: Jan., 35
of lumbar spine, *1983*: Jan., **147–169**
of spinal stenosis, *1983*: July, 544, 545, 546
use of in orthopedics, *1983*: Jan., **217–232**
CT discography, *1983*: July, 523
Cup arthroplasty, *1982*: Oct., 661
Cushing's disease, *1984*: Oct., 706–709
clinical presentation of, *1984*: Oct., 707
effects of, *1984*: Oct., 706
histologic features of, *1984*: Oct., 707
hyperparathyroidism and hyperthyroidism and, *1984*: Oct., **697–710**
laboratory examination for, *1984*: Oct., 707
osteoporosis due to, characteristics of, *1984*: Oct., 639
radiologic features of, *1984*: Oct., 707, 708
treatment of, *1984*: Oct., 707, 709
Cybex exercise equipment, *1983*: April, 410, 411

Debridement, for infected nonunion of femur and tibia, *1984*: July, 483–484
Degenerative arthritis. See *Arthritis, degenerative.*
Degenerative joint disease, arthroscopy in, *1982*: April, 419–420
Degloving injury, of hand, *1983*: Oct., 724–725
of thumb, *1983*: Oct., 859

Depo-Medrol, in epidural block, *1983*: July, 557, 559
De Quervain's disease, *1982*: July, 483–485
Dermatomes, *1983*: Jan., 276
incorrect use of as descriptors of pain location, *1983*: July, 487–488
Desensitization, after digital amputation, *1983*: Oct., 867–868
of fingertips, *1983*: Oct., 695–696
Dextran, after replantation surgery, *1983*: Oct., 884
Diathermy, microwave, *1982*: July, 582
Diet, for athlete, *1983*: April, 387–389
vegetarian, *1983*: April, 389–390
weight gain, *1983*: April, 394–395
weight loss, *1983*: April, 393–394
for osteogenesis imperfecta, *1984*: Oct., 783–784
Digital nerve, compression of, *1982*: July, 482–483
Diphosphonates, in Paget's disease, *1983*: Jan., 17; *1984*: Oct., 759–760
Direct current, constant, implantable system of, *1984*: Jan., **47–59**
treatment of nonunion with, *1984*: Jan., **33–45**
Disability, determination of, in low back pain, *1982*: July, 435, **559–568**
Disabled. See *Handicapped*.
Disc, herniated, in child, *1982*: July, 591
intervertebral, degeneration of, *1983*: July, 494–496
herniation of, surgery for, *1983*: July, 570–580
hydrodynamics of, *1983*: July, 475–478
injection of for pain, *1983*: July, 564–565
nerve supply of, *1983*: July, 641
lumbar, disease of, chemonucleolysis for, *1983*: July, **605–622**
CT of, *1983*: Jan., 158, 162–164, 166
ruptured, anatomy of, *1983*: July, 506–507
criteria for diagnosis, *1983*: July, 510–511
CT of, *1983*: July, 523, 546
microdiscectomy for, *1983*: July, **589–603**
tears of, healing of, *1983*: July, 641–643
Discectomy, exercises following, *1983*: July, 654
lumbar, micro, *1983*: July, **589–603**
postsurgical instructions to patient, *1983*: July, 652–654
Discitis, in child, *1982*: July, 596–598
Discography, *1983*: July, 523, 643
Discoid meniscus, *1982*: April, 383, 418
Disease, chronic debilitating, anaerobic septic arthritis in, *1984*: July, 514–515
DISI, roentgenographic characteristics of, *1984*: April, 186–188, 295–296
DISI *(Continued)*
scaphoid fracture with, treatment of, *1984*: April, 301–302
treatment of, *1984*: April, 302–303, 304
Dislocation(s), fractures and, of carpus, acute, *1984*: April, **237–258**
intercarpal, *1984*: April, 240–255
complications of, *1984*: April, 254–255
of finger, *1983*: Oct., 803–805
of hip, after surface replacement arthroplasty, *1982*: Oct., 770–771
of lunate, treatment of, *1984*: April, 243–244, 248, 250
of scaphoid, treatment of, *1984*: April, 253–254
of sternoclavicular joint, *1983*: Jan., 96
of thumb carpometacarpal joint, treatment of, *1984*: April, 268–270
perilunate, treatment of, *1984*: April, 243–253
subluxation and, of acromioclavicular joint, *1983*: Jan., 93
Dorsiflexion intercalated segmental instability. See *DISI*.
Double-cup arthroplasty. See *Surface replacement arthroplasty*.
Drug dependence, in patient with chronic low back pain, *1983*: July, 633
Duopatellar total knee replacement, *1982*: Jan., **89–102**
Dystrophy, single finger, after amputation, *1983*: Oct., 856

"Eaton's angle," *1983*: Oct., 724
Eccentric weight training, *1983*: April, 452–453
Ectopic bone, formation after surface replacement arthroplasty of hip, *1982*: Oct., 769–770
Edema, chronic, in crushed upper limb, *1983*: Oct., 732–733
in injured hand, treatment of, *1983*: Oct., 751–752, 754–755, 781, 788–789
Elbow, arthroplasty of, total infected, management of, *1984*: July, 500–501
arthroscopic removal of loose body from, *1982*: April, 327
overuse injuries of, in child, *1983*: April, 350, 352
Elbow replacement, radiography of, *1983*: Jan., 188–189
Electrical stimulation, of bone growth. See also particular type of stimulation.
capacitive, *1984*: Jan., 16–17
compatibility of devices for with other metallic devices, *1984*: Jan., 73–74
faradic, *1984*: Jan., 16
inductive, *1984*: Jan., 17

Electrical stimulation, of bone growth *(Continued)*
non–weight-bearing during, *1984*: Jan., 68–71
symposium on, *1984*: Jan., **1–179**
of epiphyseal plate, in animals, *1984*: Jan., 22–23
of nonunion, uses and abuses of, *1984*: Jan., **89–100**
of soft tissue repair and remodeling, *1984*: Jan., 24–25
of tissue regeneration, *1984*: Jan., 23
Electromagnetic signals, exogenous, tissue response to, *1984*: Jan., **15–31**
Electromyography, for low back conditions, *1983*: July, 524–525
Electrotherapy, *1982*: July, 584–585
Emergency department, care of crushed upper limb in, *1983*: Oct., 719–720
Emission computed tomography (ECT), *1983*: July, 549
Energy, production and utilization of, in athletes, *1983*: April, 459–467
Enostoses, spinal, *1983*: Jan., 135–137
Epidural block, graduated, and spinal block, *1983*: July, 563–564
guaranteeing location of injection in, *1983*: July, 555–556
indwelling, *1983*: July, 561–563
studies of, *1983*: July, 560–561
Epidural injection, *1982*: July, 430; *1983*: July, 556–559
Epiphyseal plate, in animals, electrical stimulation of, *1984*: Jan., 22–23
Escharotomy, after burn, *1983*: Oct., 701–703
Escherichia coli in osteomyelitis, *1983*: Jan., 24
Examination, preparticipation, for sports, *1983*: April, 298, 323–328
form for, *1983*: April, 298
Exercise equipment, *1982*: July, 531–532
Exercises, flexibility, for athlete, *1982*: July, 526–528
for low back pain, principles involved in, *1983*: July, 634–636
therapeutic, *1982*: July, 583
Extensor carpi ulnaris tendon, in painful injured wrist, examination of, *1984*: April, 292–293
Extensor mechanism, abrasion injury of, *1983*: Oct., 825–826
Extensor tendons, injury to, management and rehabilitation of, *1983*: Oct., **811–826**
External fixation, in knee arthrodesis, *1982*: Jan., 218–220

Face, bones of, Paget's disease of, radiographic and clinical manifestations of, *1984*: Oct., 758
Face *(Continued)*
laceration of, in athlete, field management of, *1983*: April, 335–336
Facet joint, disease of, CT of, *1983*: Jan., 167
injection of, for low back pain, *1982*: July, 430; *1983*: July, 570–571
lumbar, *1983*: July, 478–480
Faradic electrical stimulation, *1984*: Jan., 16
Fartlek, *1982*: July, 537, 539
Fasciotomy, for compartment syndrome, *1983*: Oct., 721–722, 724
Fast twitch fibers. See *Muscle fiber.*
Femur, fatigue test of, after double-cup arthroplasty, *1982*: Oct., 694
fracture of, united, osteomyelitis of, incidence of, *1984*: July, 482
head of, and neck, anatomy of, *1982*: Oct., 667–668
avascular necrosis of, after surface replacement arthroplasty, *1982*: Oct., 762–763, 765
electrical treatment of, early results of, *1984*: Jan., **163–175**
in Gaucher's disease in children, *1984*: Oct., 769–770
blood supply of, *1982*: Oct., 747–748
in Gaucher's disease, *1984*: Oct., 768
neck of, fracture of, following surface replacement arthroplasty, *1982*: Oct., 702, 768, 795
in Paget's disease, treatment of, *1984*: Oct., 760
load-carrying ability of, *1982*: Oct., 692–693
nonunion of, *1984*: Jan., 98–99, 120
ambulatory spica for, *1984*: Jan., 78
infected, vascularized, bone transfer for, *1984*: July, 466–470
osteomyelitis of, incidence of, *1984*: July, 482
osteomyelitis of, incidence of, *1984*: July, 482
postoperative, incidence of, *1984*: July, 482
Paget's disease of, *1983*: Jan., 12
radiographic and clinical manifestations of, *1984*: Oct., 758
radiographic features of, *1984*: Oct., 754, 755
tibia and, infected nonunion of, *1984*: July **481–490**
treatment of, *1984*: July, 483–488
trabeculae of, *1982*: Oct., 668, 671
Fibrocartilage, triangular. See *Triangular fibrocartilage.*
Fibrosis, in disorders of bone and marrow, *1984*: Oct., 620
Fibula, as donor site for vascularized bone transfer, *1984*: July, 462–463
Field events, strength training for, *1983*: April, 445

Finger(s). See also specific digit.
capsule of, chronic problems of, *1983*: Oct., 808–809
composite burn of, *1983*: Oct., 711, 713
fracture of, *1983*: Oct., 805–808
interphalangeal joints of, anatomy of, *1983*: Oct., 794–797
lateral ligament of, disruption of, *1983*: Oct., 800–802
small joints of, injuries to, management of, *1983*: Oct., **793–810**
Fingernail, anatomy of, *1983*: Oct., 675–678
Fingertip(s), amputation of, treatment of, *1983*: Oct., 680–683
desensitization of, *1983*: Oct., 695–696
injury of, classification of, *1983*: Oct., 680
nail bed injury and, treatment of, *1983*: Oct., **675–697**
Finkelstein test, *1982*: July, 484
Fixation, external, in knee arthrodesis, *1982*: Jan., 218–220
internal, for hand fracture, *1983*: Oct., 783
in knee arthrodesis, *1982*: Jan., 220–221
Flaps. See specific types.
Flap tear, of meniscus, excision, *1982*: April, **387–397**
Flatfoot, in child, *1982*: July, 641–644
Flexion contracture, of knee, correction of, *1982*: Jan., 7, 20–21, 164
Flexion-extension, carpal components and, *1984*: April, 202–204
Flexor carpi radialis, sheath of, in painful injured wrist, examination of, *1984*: April, 294
Flexor-hinge hand, *1983*: Oct., 895–896
Flexor muscles, short, flaps of, for soft tissue defects of foot, *1984*: July, 448
Flexor tendon(s), acute injury of, management of, *1983*: Oct., **827–849**
anatomy of, *1983*: Oct., 828–831
healing of, *1983*: Oct., 832–834
nourishment of, *1983*: Oct., 831–832
repair of, mobilization after, *1983*: Oct., 843–844
Focal scleroses, spinal, *1983*: Jan., 135–137
Foot, problems of, in adult, *1982*: July, **511–524**
in child, *1982*: July, **641–654**
soft tissue defects of, muscle flaps for, *1984*: July, 448
Football, strength training for, *1983*: April, 442–443
Force, transmission of, in wrist, *1984*: April, 194, 196–198
Force-bearing column, of wrist, *1984*: April, 194, 196–198
Forearm, extensor tendon of, injury to, *1983*: Oct., 824
nonunion of, treatment of, *1984*: Jan., 117
Fracture(s), articular, of distal radius, *1984*: April, **217–236**
classification of, *1984*: April, 221–223
of radius, displacement patterns in, *1984*: April, 219–220
Bennett's, treatment of, *1984*: April, 268–270
bone scintigraphy in, *1983*: Jan., 246
carpal, roentgenographic characteristics of, *1984*: April, 188
Colles', injuries to median nerve and, *1984*: April, 280–282
Sudek's atrophy and, *1984*: April, 281–282
treatment of, median nerve compression and, *1984*: April, 280–281
delayed union of, PEMFs for, *1984*: Jan., 74–75
die punch, of distal radius, *1984*: April, 222, 225, 228–231
dislocations and, of carpus, acute, *1984*: April, **237–258**
of glenohumeral joint, *1983*: Jan., 86–89
healing of, electrical stimulation of, *1984*: Jan., 19–21
stages of, *1984*: Jan., 18–19
in osteomalacia, *1984*: Oct., 636–637
in Paget's disease, treatment of, *1984*: Oct., 760
in total hip replacement, *1983*: Jan., 182–183
nonunion of. See *Nonunion*.
of finger, *1983*: Oct., 805–808
of hamate, *1984*: April, 240
of hand, *1983*: Oct., **779–792**
spiral, fixation for, *1983*: Oct., 783–784
malunion after, *1983*: Oct., 785–786
transverse, malunion after, *1983*: Oct., 786
of little finger metacarpal, *1983*: Oct., 786–787
of medial four carpometacarpal joints, *1984*: April, 261–264
of scaphoid. See *Scaphoid, fractures of*.
osteopenia and, *1984*: Oct., 712, 715, 721
pathologic, in Paget's disease, *1984*: Oct., 752–753
pelvic, angiography of, *1983*: Jan., 263–267
spike, of distal radius, *1984*: April, 222, 231–232
split, of distal radius, *1984*: April, 222, 232–234
treatment of, and anaerobic osteomyelitis, relationship between, *1984*: July, 507–508
vertebral, due to osteoporosis, *1984*: Oct., 711–712

Fracture(s), vertebral *(Continued)*
incidence of, bone histomorphometry and, effects of osteoporosis treatment with sodium fluoride and calcium on, *1984*: Oct., **729–745**
vertebral compression, in diagnosis of osteopenia, *1984*: Oct., 634–635
in Gaucher's disease, *1984*: Oct., 768–769
osteopenic, versus metastatic disease, radionuclide scanning for differentiation of, *1984*: Oct., 641–643
volar pole, *1983*: Oct., 787
Fracture-dislocation(s), at base of fifth metacarpal, *1984*: April, 265–266
intercarpal, *1984*: April, 240–255
complications of, *1984*: April, 254–255
of medial four carpometacarpal joints, *1984*: April, 261–264
of thumb carpometacarpal, treatment of, *1984*: April, 268–270
Free-standing surgical center, arthroscopic surgery in, *1982*: April, **277–282**
Free tissue transfers, for chronic osteomyelitis, *1984*: July, 461–472
Freiberg's infraction, *1982*: July, 649–650; *1983*: Jan., 111
Frejka pillow, *1982*: July, 607
Friction burn, of hand, contracture after, *1983*: Oct., 707–708
Frozen shoulder, *1982*: July, 465, 468–469
Fusion. See also *Arthrodesis*.
of wrist, partial, for rheumatoid arthritis, *1984*: April, 371–374
total, for rheumatoid arthritis, *1984*: April, 374–377

Gait, in runner, videotape analysis of, *1982*: July, 547
Galeazzi test, *1982*: July, 611
Gallium, *1984*: Jan., 128
in scintigraphy, localization of, mechanisms of, *1984*: July, 402–403
Games, athletic, presence of physician at, *1983*: April, 328–330
Ganglion(a), compression of ulnar nerve by, *1984*: April, 283–284
formation of, carpal boss and, *1984*: April, 266–267
of wrist, *1983*: Jan., 200–201
and ganglia of hand, *1982*: July, 493
Gas, as medium for arthroscopic surgery, versus fluid, *1982*: April, **293–298**
Gastrocnemius muscle, flap of, for chronic osteomyelitis, *1984*: July, 453–455, 456
medial and lateral heads of, flaps of, for soft tissue defects of knee, *1984*: July, 443
for soft tissue defects of upper and middle thirds of tibia, *1984*: July, 443, 444–446
Gaucher cell, *1984*: Oct., 766
Gaucher's disease, *1984*: Oct., **765–774**
bone pain in, *1984*: Oct., 769
classification of, *1984*: Oct., 765
clinical manifestations of, *1984*: Oct., 767–773
definition of, *1984*: Oct., 765
diagnosis of, *1984*: Oct., 767
pathophysiology of, *1984*: Oct., 765–767
treatment of, *1984*: Oct., 767–773
Glenohumeral joint, adhesive capsulitis of, *1983*: Jan., 92–93
articular disease of, *1983*: Jan., 89
calcific periarthritis of, *1983*: Jan., 89–90
description of, *1983*: Jan., 81
fracture and dislocation of, *1983*: Jan., 86–89
instability of, *1982*: July, 469–470
radiographic examination of, *1983*: Jan., 82–85
Gluteus minimus, anatomy of, *1982*: Oct., 673
Glycocalyx, bacterial, bacterial adherence and, role of in musculoskeletal infection, *1984*: July, **517–535**
probable synthesis and function of, *1984*: July, 520
Glycogen loading, *1983*: April, 391
Glycolytic metabolism, *1983*: April, 461
Gonococci, antimicrobial resistance and, *1984*: July, 421
Gout, *1982*: July, 515
Grasping forceps, for arthroscopic surgery, *1982*: April, 391
Gravity lumbar reduction, *1982*: July, 429
Greater trochanter, healing of following surface replacement arthroplasty, *1982*: Oct., 771
Growth, of bone, electrical stimulation of, symposium on, *1984*: Jan., **1–179**
Growth plate, *1984*: Oct., **571–595**
cartilaginous component of, *1984*: Oct., 574–584, 585–589
hypertrophic zone of, *1984*: Oct., 578–584, 585–589
proliferative zone of, *1984*: Oct., 576–578
reserve zone of, *1984*: Oct., 576, 577
fibrocartilaginous peripheral structure of, *1984*: Oct., 591–593
injury to, repetitive microtrauma from athletic activity as cause of, *1983*: April, 340
metaphysis of, *1984*: Oct., 584, 589–591
vascular supply of, *1984*: Oct., 572–574, 575
Growth spurt, association of with athletic injuries, *1983*: April, 342–343
Guanethidine, for hand ischemia, *1982*: July, 492
Gymnastics, strength training for, *1983*: April, 443

Haemophilus, antimicrobial resistance and, *1984*: July, 421–422
Hamate, fractures of, *1984*: April, 240
hook of, in painful injured wrist, examination of, *1984*: April, 294
in painful injured wrist, examination of, *1984*: April, 293
Hamatocapitate joint, rotational control and, *1984*: April, 198
Hamatocapitate ligament, role of, *1984*: April, 200
Hand, amputation of, rehabilitation after, *1983*: Oct., **851–872**
compartment syndromes of, after crush injury, *1983*: Oct., 721–722, 724
contracture of, after friction burn, *1983*: Oct., 707–708
fractures of, *1983*: Oct., **779–792**
in patient with C5–C6 quadriplegia, surgery of, *1983*: Oct., **893–904**
normal, basic functional patterns of, *1983*: Oct., 856
pain in, diagnosis and treatment of, *1982*: July, **477–495**
small joints of, injury to, management of, *1983*: Oct., **793–810**
stiffness in, management of, *1983*: Oct., **749–765**
surgery of, rehabilitation after, symposium on, *1983*: Oct., **673–935**
Handicapped. See also specific dysfunction or disability.
assessment of fitness in, *1983*: April, 307
athletic competition for, *1983*: April, 301–305
cardiorespiratory fitness of, *1983*: April, 309
medical classification of, use in athletic competition, *1983*: April, 305–306
muscle function testing in, *1983*: April, 308
muscular strength and endurance of, *1983*: April, 309–310
sports and recreation for, *1983*: April, **301–315**
Vo_2 max in, *1983*: April, 307
Healing, of fracture, electrical stimulation of, *1984*: Jan., 19–21
stages in, *1984*: Jan., 18–19
Hemodialysis, aluminum intoxication due to, development of bone disease and, *1984*: Oct., 693–695
metabolic disturbances with, *1984*: Oct., 687–691
Heparin, after replantation surgery, *1983*: Oct., 884
Herniation, end-plate, *1982*: July, 595, 596; *1983*: Jan., 73–74, 105–106, 125–127
Hill-Sachs lesion, *1983*: Jan., 86–88
Hinge knee arthroplasty, metallic, *1982*: Jan., 91
Hip, anatomy of, *1982*: Oct., **667–679**
Hip *(Continued)*
capsule of, *1982*: Oct., 673
dysplasia of, infantile, treatment of, *1982*: July, **605–618**
nonunion of, treatment of, *1984*: Jan., 119
Paget's disease of, radiographic and clinical manifestations of, *1984*: Oct., 758
pelvis and, overuse injuries of, in child, *1983*: April, 352
soft tissue defects of, muscle flaps for, *1984*: July, 443
surface replacement arthroplasty of, symposium on, *1982*: Oct., **659–923**
total arthroplasty of, for arthritis in Paget's disease, *1984*: Oct., 760–762
for Gaucher's disease in adults, *1984*: Oct., 770–773
infected, management of, *1984*: July, 496–499
vascular supply of, *1982*: Oct., 673–676
Hip disease, in Gaucher's disease, in adults, *1984*: Oct., 770–773
in children, *1984*: Oct., 769–770
Histomorphometry, for diagnosis of metabolic bone disease, *1984*: Oct., 621–626
vertebral fracture incidence and, effects of osteoporosis treatment with sodium fluoride and calcium on, *1984*: Oct., **729–745**
Hormone(s). See specific hormones.
Humerus, nonunion of, *1984*: Jan., 100, 116–117
PEMF treatment of, *1984*: Jan., 77, 79
Paget's disease of, *1984*: Oct., 749
radiographic and clinical manifestations of, *1984*: Oct., 758
Hydra-Gym, *1983*: April, 432
Hydroxyapatite rheumatism, of glenohumeral joint, *1983*: Jan., 89–90
Hypercortisolism. See *Cushing's disease*.
Hyperparathyroidism, *1984*: Oct., 699–704
clinical presentation of, *1984*: Oct., 700
histologic and histomorphometric hallmarks of, *1984*: Oct., 628
histologic features of, *1984*: Oct., 703–704
hyperthyroidism and Cushing's disease and, *1984*: Oct., **697–710**
laboratory examination for, *1984*: Oct., 700–701
primary, radionuclide scanning in, *1984*: Oct., 643
radiography of, *1983*: Jan., 78–79; *1984*: Oct., 701–703
subperiosteal bone resorption in, *1984*: Oct., 637–638
treatment of, *1984*: Oct., 704
Hyperthyroidism, *1984*: Oct., 704–706
clinical presentation of, *1984*: Oct., 704–705
histologic features of, *1984*: Oct., 706
hyperparathyroidism and Cushing's disease and, *1984*: Oct., **697–710**
laboratory examination for, *1984*: Oct., 705

Hyperthyroidism *(Continued)*
radiologic features of, *1984*: Oct., 705
treatment of, *1984*: Oct., 706
Hypophosphatemia, osteomalacia due to, chemical abnormalities in, *1984*: Oct., 665
Hypoplastic neural arch complex, spondylolysis and, *1983*: Jan., 137, 140

ICLH double-cup arthroplasty, *1982*: Oct., **799–811**
ICLH knee replacement, cementless fixation of, *1982*: Jan., **141–154**
design of, *1982*: Jan., 142–145
Iliac crest, as donor site for vascularized bone transfer, *1984*: July, 463
taking of bone graft from, *1984*: Jan., 115
Immobilization, detrimental effects of on muscle function, *1983*: April, 406
Inclinometer, for assessing lumbar spine motion, *1983*: July, 628–630
Indium, in scintigraphy, localization of, mechanisms of, *1984*: July, 403–404
Indium-labeled leukocyte scan(s), for musculoskeletal sepsis, utilization and interpretation of, *1984*: July, 406, 407
Inductive electrical stimulation, *1984*: Jan., 17
Infarction, bone, osteomyelitis versus, in children, scintigraphic differentiation of, *1984*: July, 408
Infection(s). See also *Sepsis*.
after surface replacement arthroplasty of hip, *1982*: Oct., 773–774
fungal, *1983*: Jan., 31
musculoskeletal, role of bacterial adherence and glycocalyx in, *1984*: July, **517–535**
of femoral and tibial nonunion, *1984*: July, 481–490
of joint space, scintigraphic detection of, *1984*: July, 411
of knee arthroplasty, *1982*: Jan., **245–249**
arthrodesis for, *1982*: Jan., 214
of total joint arthroplasty, diagnosis of, *1984*: July, 494–495
management of, *1984*: July, **491–504**
prevention of, *1984*: July, 501
orthopedic, antibiotic therapy of, duration of, *1984*: July, 561–562
selection of, *1984*: July, 549–558
common microorganisms in, *1984*: July, 558–561
prosthetic, etiology of, *1984*: July, 491–494
soft tissue, in orthopedic surgery, antibiotic treatment of, *1984*: July, 561
use of electrical stimulation in patients with, *1984*: Jan., 73, 81
Infrared lamp therapy, *1982*: July, 581
Injection techniques, for low back pain, *1982*: July, 430; *1983*: July, **553–567**
Injury(ies). See also *Trauma*.
acute, of flexor tendon, *1983*: Oct., **827–849**
athletic, association of growth spurt with, *1983*: April, 342–343
determinants of return to activity after, *1983*: April, **317–321**
facial, field management of, *1983*: April, 335–336
interaction of psychological and physiologic factors in, *1983*: April, 377–378
on-the-field treatment of, *1983*: April, 333–336
prevention of, *1983*: April, 330–331
psychological factors in treatment of, *1983*: April, **373–385**
rehabilitation after, *1983*: April, 406–407
return to weight training after, *1983*: April, 446–447
nerve, management and rehabilitation of, *1983*: Oct., **767–778**
of fingertip and nail bed, treatment of, *1983*: Oct., **675–697**
overuse, in children, *1983*: April, **337–360**
to runners, *1982*: July, **541–558**
Intercalary collapse patterns, *1984*: April, 186–188
Intercalated segment, carpal. See *Carpus, intercalated segment of*.
Internal fixation, devices for, compatibility of with PEMFs, *1984*: Jan., 80–81
in congenital pseudarthrosis, *1984*: Jan., 148
in knee arthrodesis, *1982*: Jan., 220–221
K-wire, for hand fracture, *1983*: Oct., 783
Interosseous ligaments, of carpus, role of, *1984*: April, 199–200
Interphalangeal joint, anatomy of, *1983*: Oct., 794–797
distal, injury to extensor tendon over, *1983*: Oct., 811–812, 815
Interphalangeal ligament, anatomy of, *1983*: Oct., 793–794
Intramedullary rods, for osteogenesis imperfecta, *1984*: Oct., 785–790
Intrathecal steroid injection, *1983*: July, 564
Iron, deficiency of, effect on athletic performance, *1983*: April, 392
Isodynamic exercise, *1983*: April, 434
Isokinetic exercise, *1983*: April, 408, 410, 454–455
compared with isometric, *1983*: April, 455
compared with isotonic, *1983*: April, 455
Isokinetic muscle testing, *1983*: April, 320–321
in handicapped, *1983*: April, 308
Isolated disc disruption syndrome, *1983*: July, 514

Isometric exercise, *1983*: April, 407–408, 434, 450–451
compared with isokinetic, *1983*: April, 455
compared with isotonic, *1983*: April, 455
compared with variable resistance, *1983*: April, 456
Isotonic exercise, *1983*: April, 408, 451–452
compared with isometric, *1983*: April, 455
compared with variable resistance, *1983*: April, 455

Jaw, Paget's disease of, radiographic and clinical manifestations of, *1984*: Oct., 758
Jobst pump, for hand fractures, *1983*: Oct., 788–789
Joint(s). See also under specific name.
aspiration of, in evaluation of chronic wrist pain, *1984*: April, 190–191
carpal, ligamentous control of motion and, *1984*: April, 193–194
carpometacarpal. See *Carpometacarpal joint(s)*.
small, of hand, injury to, management of, *1983*: Oct., **793–810**
stiffness in, after crush injury, *1983*: Oct., 733–735
Joint adhesion, tendon adhesion and, treatment of, *1983*: Oct., 741–742
Joint Jack, *1983*: Oct., 818, 819
Joint replacement, bone scintigraphy in, *1983*: Jan., 248
radiography of, *1983*: Jan., **171–191**
Joint space(s), infection of, scintigraphic detection of, *1984*: July, 411
Judet "ball-on-stick" design hip replacement, *1982*: Oct., 711

Kienböck's disease, *1983*: Jan., 109–111; *1984*: April, **355–367**
bone scan in, *1984*: April, 329
classification of, *1984*: April, 357–358, 360, 361
radiographic characteristics of, *1984*: April, 300
treatment of, *1984*: April, 358–359, 361–365
Kinematic rotating hinge prosthesis, *1982*: Jan., **187–199**
pressure patterns on, *1982*: Jan., 192
stresses on, *1982*: Jan., 191–192
Kinematic stabilizer knee, *1982*: Jan., 99–100
Kinematics, of normal knee, *1982*: Jan., 103–107
of PCA knee, *1982*: Jan., 111–112
Klebsiella pneumoniae, in osteomyelitis, *1983*: Jan., 24

Knee, arthritic, radionuclide bone scan of, *1982*: Jan., 227
arthroscopic surgery of. See *Arthroscopy, operative;* see also particular procedures, problems and structures.
articular cartilage of, injury, arthroscopic surgery for, *1982*: April, 408–409
chronic osteomyelitis of, gastrocnemius flap for, *1984*: July, 453, 454
distention of, in arthroscopic surgery, *1982*: April, 289–290
flexion deformities of, correction, *1982*: Jan., 20–21, 164
technique for releasing, *1982*: Jan., 7
kinematics of, *1982*: Jan., 103–107
loose body in, arthroscopic removal of, *1982*: April, **313–326**
model of, for learning arthroscopic surgery, *1982*: April, 256–257
nonunion of, treatment of, *1984*: Jan., 120
office evaluation of, *1982*: July, **497–509**
overuse injuries of, in child, *1983*: April, 352–356
Paget's disease of, radiographic and clinical manifestations of, *1984*: Oct., 758
rehabilitation of, biomechanics of, *1983*: April, **397–402**
soft tissue defects of, muscle flaps for, *1984*: July, 443
valgus deformity of, correction of, *1982*: Jan., 19–20, 21, 164
varus deformity of, correction of, *1982*: Jan., 18–19, 164
Knee arthroplasty. See also name of device.
analysis of diffusion of load through tibial implant, *1982*: Jan., 67–69
results of, *1982*: Jan., 70–78
arthrodesis after failure of, *1982*: Jan., **213–224**
external fixation in, *1982*: Jan., 218–220
internal fixation in, *1982*: Jan., 220–221
intramedullary fixation in, *1982*: Jan., 221–223
arthrography in, *1982*: Jan., 238
deformation of ultrahigh molecular weight polyethylene in, *1982*: Jan., 35–38
development by Walldius, *1982*: Jan., 173
disadvantages of polymethylmethacrylate in, *1982*: Jan., 141–142
failure of, causes of, *1982*: Jan., 201–202
resection arthroplasty for, *1982*: Jan., 223
salvage of, *1982*: Jan., 164, 167–168
fracture of components in, *1982*: Jan., 34–35
ideal design of, *1982*: Jan., 78–81
improved materials for, *1982*: Jan., 42–43
infection of, *1982*: Jan., **245–249**
arthrodesis for, *1982*: Jan, 214
loosening of, radiographic signs of, *1982*: Jan., 228, 230

Knee arthroplasty *(Continued)*
material failures in, analysis of, *1982*: Jan., **33–44**
posterior stabilized, *1982*: Jan., **131–139**
principles of bone resection in, *1982*: Jan., 23–29
radiologic evaluation of, *1982*: Jan., **225–244**; *1983*: Jan., 183–187
radionuclide bone scan in, *1982*: Jan., 240–241
retention of posterior cruciate ligament in, *1982*: Jan., 93–94
revision after, *1982*: Jan., **201–212**
clinical results in, *1982*: Jan., 207–211
selection of device for, *1982*: Jan., 205–206
sinography in, *1982*: Jan., 239
surgical technique for, principles of, *1982*: Jan., **17–31**
three-body wear, *1982*: Jan., 38, 142
total, infected, management of, *1984*: July, 499
symposium on, *1982*: Jan., **1–253**
wear of components in, *1982*: Jan., 38–42
Köhler's disease, *1982*: July, 648–649; *1983*: Jan., 103–104
Kyphosis, Scheuermann's, *1982*: July, 594–596

Laceration, of fingertip, treatment of, *1983*: Oct., 678–679
Lachman test, *1982*: July, 504, 507
Laminectomy, exercises following, *1983*: July, 655
Lateral pinch, in patient with C5–C6 quadriplegia, *1983*: Oct., 895
Leg. See *Lower extremity.*
Legg-Calvé-Perthes syndrome, office management of, *1982*: July, **619–627**
Legg-Perthes disease, *1983*: Jan., 111–116
bone scintigraphy in, *1983*: Jan., 248
Ligament(s). See also under specific names.
carpal, role of, *1984*: April, 199–200
carpal joint motion and, *1984*: April, 193–194
carpometacarpal, *1984*: April, 260
collateral, relationship to interphalangeal condyles, *1983*: Oct., 797–798
interphalangeal, anatomy of, *1983*: Oct., 793–794
lateral, of finger, disruption of, *1983*: Oct., 800–802
of wrist. See *Wrist, ligaments of.*
spinal, *1983*: July, 480–482
Ligamentous looseness index, performance tests to determine, *1983*: April, 327–328
Ligamentum flavum, *1983*: July, 481–482
Light microscopy, for diagnosis and evaluation of metabolic bone disease, *1984*: Oct., 617–621
Linscheid test, for carpometacarpal joint instability with ligamentous injury, *1984*: April, 291–292
Liquid crystal thermography, in spinal root compression syndromes, *1983*: Jan., **271–288**
Little finger, metacarpal of, fracture of, *1983*: Oct., 786–787
Little League elbow, *1983*: April, 350, 352
Little League shoulder, *1983*: April, 348–349
Long bones, chronic osteomyelitis of, *1984*: July, 435–438
nonunion of, free vascularized bone grafting for, *1984*: Jan., **131–142**
implantable direct current for, *1984*: Jan., 50
technetium and gallium scintigraphy of, *1984*: Jan., **125–130**
Looser's zones, radiographic appearance of, *1983*: Jan., 77–78
Low back, injury to, insurance costs of, *1983*: July, 662–663
pain in, chronic, arthrodesis for, *1983*: July, **639–647**
biofeedback for, *1983*: July, 633
conservative treatment of, *1982*: July, **427–437**
CT evaluation of, *1983*: Jan., **147–169**; July, **539–551**
determination of disability in, *1982*: July, 435, **559–568**
drug dependence in patient with, *1983*: July, 633
economic and social costs of, *1983*: July, 623–624
exercises for rehabilitation of, principles of, *1983*: July, 634–636
injection techniques for, *1983*: July, **553–567**
nonspecific, conservative care of, *1982*: July, **427–437**
patient with, evaluation of by occupational therapist, *1983*: July, 521–522
profile of, *1983*: July, 625–627
psychological evaluation of, *1983*: July, 520, **527–538**
rehabilitation of, *1983*: July, **623–637**
TENS for, *1983*: July, 633–634, 650–651
Lowenstein procedure, for distal radioulnar joint dislocation, *1984*: April, 331, 332
Lower extremity, of child, torsional abnormalities of, *1982*: July, **629–639**
soft tissue defects of, muscle flaps for, *1984*: July, 442–448
Lumbar disc, disease of, chemonucleolysis for, *1983*: July, **605–622**

Lumbar disc, disease of *(Continued)*
CT of, *1983*: Jan., 158, 162–164, 166
ruptured, anatomy of, *1983*: July, 506–507
criteria for diagnosis of, *1983*: July, 510–511
CT of, *1983*: July, 523, 546
microdiscectomy for, *1983*: July, **589–603**
Lumbar epidural venography, *1983*: July, 522–523
Lumbar facet injection, *1982*: July, 430; *1983*: July, 570–571
Lumbar spine. See *Spine, lumbar.*
Lumbosacral fusion, implantable direct current in, *1984*: Jan., 55–56
Lunate, avascular necrosis of, *1984*: April, 355–367
dislocation of, treatment of, *1984*: April, 243–244, 248, 250
in painful injured wrist, examination of, *1984*: April, 292
in SLAC wrist, *1984*: April, 338–341
osteonecrosis of, *1983*: Jan., 109–111
revascularization of, for Kienböck's disease, *1984*: April, 363–364
vascular anatomy of, *1984*: April, 356–357, 358, 359, 360
Lunatocapitate joint, osteoarthritis in, dorsal intercalated segment collapse and, *1984*: April, 204–205
Lunatotriquetral ballottement test, *1984*: April, 312
Lunatotriquetral instability, treatment of, *1984*: April, 303–304, 305
Lunatotriquetral ligament, isolated tears of, pathogenesis of, *1984*: April, 205–206
role of, *1984*: April, 199–200

Macromorphometry, *1983*: Jan., 67–68
Malalignment, rotational, of lower extremity, in child, *1982*: July, **629–639**
Malignant disease. See *Tumor.*
Mallet finger, *1983*: Oct., 813
Malunion, after hand fracture, *1983*: Oct., 785–787
Marcaine, in epidural block, *1983*: July, 557
Marmor knee replacement, *1982*: Jan., **55–63**
Marrow, evaluation by light microscopy, for metabolic bone disease, *1984*: Oct., 617–618
Massage, therapeutic, *1982*: July, 584
Matrix, bone, extracellular, *1984*: Oct., 600–606
Maxi-Rack, *1983*: April, 437–439
McKeever metallic hemi-arthroplasty, *1982*: Jan., 90
McMurray test, *1982*: July, 508
"Mechanical backache," in middle-aged patient, correlation of with pathologic anatomy, *1983*: July, 509–510
Medial shelf, pathologic, *1982*: April, **307–312**
Median nerve, anatomy of, *1984*: April, 279–280
compression of at wrist, *1982*: July, 478–480, 482
injuries to, carpal and metacarpal injury and, *1984*: April, 282
Colles' fracture and, *1984*: April, 280–282
in distal radial articular fractures, *1984*: April, 223, 230, 231, 233
surgical exploration of, indications for, *1984*: April, 285–286
Median neuritis, as complication of intercarpal dislocations and fracture-dislocations, *1984*: April, 255
Medullary canal, area of, formula for determining, *1983*: Jan., 68
Meniscectomy, arthroscopic, superior lateral-medial approach, *1982*: April, **299–305**
total, *1982*: April, 273–274, **363–367**
Meniscus, bucket handle tear of, excision of, *1982*: April, **337–348; 369–385**
discoid, *1982*: April, 383, 418
flap tear of, excision of, *1982*: April, **387–397**
parrot beak tear of, *1982*: April, 394
thickness of, *1982*: April, 275
Menopause, osteoporosis after. See *Osteoporosis, postmenopausal.*
osteoporosis and, *1984*: Oct., 717
Mentaly retarded, orthopedic problems in. See specific disabilities and deformities.
Metabolic bone disease, biochemical tests for, *1984*: Oct., 653–660
chemical abnormalities in, *1984*: Oct., **653–669**
diagnosis and evaluation of, light microscopy for, *1984*: Oct., 617–621
diagnosis of, by histomorphometry, *1984*: Oct., 621–626
histologic and histomorphometric hallmarks of, *1984*: Oct., 628
symposium on, *1984*: Oct., **571–790**
tissue pathologic features of, *1984*: Oct., **613–629**
Metacarpal(s), second, macromorphometric evaluation of, *1983*: Jan., 67–68
micromorphometry of, *1983*: Jan., 69
osteonecrosis of, *1983*: Jan., 111
fifth, base of, fracture-dislocation at, *1984*: April, 265–266
dislocation of, *1984*: April, 261, 263
fourth and fifth, dislocation of, *1984*: April, 261, 264
injury to, median nerve injuries and, *1984*: April, 282
medial four, dislocation of, *1984*: April, 261, 262
Metacarpophalangeal joint, injuries to extensor tendon over, *1983*: Oct., 819–820, 822

Metacarpophalangeal joint *(Continued)*
stiffness in, surgery for, *1983*: Oct., 734–735
Metaphysis, of growth plate, *1984*: Oct., 584, 589–591
Metatarsus adductus, in child, *1982*: July, 629–633, 645–646
Methylmethacrylate, as factor in prosthetic infection, *1984*: July, 492
in surface replacement arthroplasty, disadvantages of, *1982*: Oct., 723, 898
in total hip replacement, radiography of, *1983*: Jan., 173
Meyer's dysplasia, *1983*: Jan., 101–102
Microbial resistance, emerging patterns of, *1984*: July, **417–425**
Microdiscectomy, *1983*: July, **589–603**
Micromorphometry, *1983*: Jan., 69
Microorganisms, resistance of to antimicrobial agents, emerging patterns of, *1984*: July, **417–425**
Microradioscopy, to visualize cortical bone resorption, *1984*: Oct., 636
Microscopy, light, for diagnosis and evaluation of metabolic bone disease, *1984*: Oct., 617–621
Microwave diathermy, *1982*: July, 582
Midcarpal instability, *1984*: April, 313–317, 318
Middle finger, and amputation of ring finger, *1983*: Oct., 863–865
Mineralization, of bone, *1984*: Oct., 606–609
Mineralization front, of bone, evaluation by light microscopy, for metabolic bone disease, *1984*: Oct., 618
Minnesota Multiphasic Personality Inventory (MMPI), *1983*: July, 528–531
Mithramycin, in Paget's disease, *1983*: Jan., 17
Mucous cysts, of distal interphalangeal joints, *1982*: July, 493
Multifidus muscle, *1983*: July, 484–485
Muscle(s). See also specific muscle.
circumferential measurement of, in performance evaluation, *1983*: April, 317–318
closed laceration of, *1983*: Oct., 725–726
spinal, *1983*: July, 482, 484–485
strength and endurance of, in handicapped, *1983*: April, 309–310
Muscle fiber, types of, characteristics, *1983*: April, 463–464
exercise specific for, *1983*: April, 421–423
histochemical differences in, *1983*: April, 413–414
relationship of to training and rehabilitation, *1983*: April, **403–411**
ultrastructural differences in, *1983*: April, **413–425**
Muscle flap(s), combination, for chronic osteomyelitis, *1984*: July, 455, 457–458
Muscle flap(s) *(Continued)*
for chronic osteomyelitis, *1984*: July, **451–459**
indications for, *1984*: July, 451–453
for infected nonunion of femur and tibia, *1984*: July, 484
for lower-extremity soft tissue defects, muscles most commonly used for, *1984*: July, 442
lower-extremity, *1984*: July, 441–449
musculocutaneous flaps and, vascularized, for osteomyelitis, *1984*: July, **473–480**
recipient vessels and vasculature evaluation for, *1984*: July, 474–475
results with, *1984*: July, 475–478
selection of, *1984*: July, 474
vascularized, selection of, for osteomyelitis, *1984*: July, 474
Muscle function, evaluation of, in handicapped, *1983*: April, 308
isokinetic testing of, *1983*: April, 320–321
manual testing of, *1983*: April, 318–319
Musculocutaneous flaps, muscular flaps and, vascularized, for osteomyelitis, *1984*: July, **473–480**
Musculoskeletal sepsis, role of bacterial adherence and glycocalyx in, *1984*: July, **517–535**
scintigraphic evaluation of, *1984*: July, **401–416**
symposium on, *1984*: July, **401–564**
Musculoskeletal surgery, anaerobic septic arthritis as complication of, *1984*: July, 511–512
antimicrobial therapy in, *1984*: July, **547–564**
prophylactic antibiotics for, *1984*: July, 562
Myelography, metrizamide, for low back pain, *1983*: July, 521–522

Nail bed, injuries of, and fingertip injury, treatment of, *1983*: Oct., **675–697**
Nautilus exercise equipment, *1982*: July, 531–532, 533; *1983*: April, 408, 435
Navicular, carpal. See *Scaphoid*.
Navicular drop, *1982*: July, 545–547
Naviculocapitate syndrome, treatment of, *1984*: April, 248, 251–252
Neck pain, evaluation and treatment of, *1982*: July, **439–452**
Necrosis, avascular. See *Avascular necrosis*.
Neoplasms, osseous, scintigraphy in, *1983*: Jan., 250–254
Nerve(s). See also specific nerves.
injury of, management and rehabilitation of, *1983*: Oct., **767–778**
wrist trauma and, *1984*: April, **279–287**
of lumbar spine, *1983*: July, 486–487

Nerve(s) *(Continued)*
of wrist, anatomy of, *1984*: April, 279–280
to intervertebral disc, *1983*: July, 641
Nesacaine, in indwelling epidural block, *1983*: July, 562
Neurapraxia, *1982*: July, 478
Neuritis, median, as complication of intercarpal dislocations and fracture-dislocations, *1984*: April, 255
Neurofibromatosis, association of with pseudarthrosis, *1984*: Jan., 143, 145
Neurologic adaptation, effect on athletic training, *1983*: April, 405–406
Neurologic dysfunction, in Paget's disease, *1983*: Jan., 7
Neuroma, *1982*: July, 490–491
after amputation, distinction of from dystrophy, *1983*: Oct., 856
Neuropathy, median and ulnar, in distal radial articular fractures, *1984*: April, 223, 230, 231 233
Neurotmesis, *1982*: July, 478
Neutron activation analysis, for measurement of bone density, *1984*: Oct., 648
NMR scanning, *1983*: July, 548–549
Nonunion. See also specific bone affected.
electrical treatment of, mechanism of action of, *1984*: Jan., 66–67
uses and abuses of, *1984*: Jan., **89–100**
factors leading to, *1984*: Jan., 91
in avascular bone, implantable direct current for, *1984*: Jan., 53
infantile. See *Congenital pseudarthrosis.*
large osseous gap with, treatment of, *1984*: Jan., 122
osteomyelitis with, treatment of, *1984*: Jan., 121–122
PEMFs for, *1984*: Jan., 75–77
treatment of, direct current, *1984*: Jan., **33–45**
role of bone graft surgery in, *1984*: Jan., **113–123**
Nuclear medicine, definition of terms in, *1984*: Jan., 126
Nucleus pulposus, herniated, in child, *1982*: July, 591
Nutrition, for athletes, *1983*: April, **387–396**
role of in osteoporosis, *1984*: Oct., 716–717

Occupational therapist, evaluation of patient with back pain by, *1983*: July, 521–522
Odontoid, nonunion of, *1984*: Jan., 115–116
Office orthopedics, symposium on, *1982*: July, **425–657**
Orthopedic infections, antibiotic therapy for, duration of, *1984*: July, 561–562
selection of, *1984*: July, 549–558
common microorganisms in, *1984*: July, 558–561
Orthopedic surgery, soft tissue infections in, antibiotic treatment of, *1984*: July, 561
Orthotic devices, for runners, *1982*: July, 551–553
prescription, *1982*: July, 554–555, 558
Orthotron exercise equipment, *1983*: April, 411
Ortolani test, *1982*: July, 610, 612–613
Os calcis, apophysitis of, *1983*: April, 356–357
Osgood-Schlatter's disease, *1983*: Jan., 108; April, 355
Osseous tissue, antibiotic distribution in, *1984*: July, 542–543
Ossification, soft tissue, in total hip replacement, *1983*: Jan., 183
Osteitis fibrosa cystica, chemical abnormalities in, *1984*: Oct., 666
in uremia, *1984*: Oct., 691
Osteoarthritis, dorsal intercalated segment collapse and, *1984*: April, 204–205
of thumb carpometacarpal joint, treatment of, *1984*: April, 271–275
Osteoblasts, *1984*: Oct., 599, 600, 614–615
Osteocalcin, measurement of, for diagnosis of metabolic bone disease, *1984*: Oct., 660
Osteochondritis dissecans, *1982*: April, 418
in child, *1982*: July, 650–651
repetitive trauma as cause of, *1983*: April, 341
in knee, *1983*: April, 356
Osteochondrosis, *1983*: Jan., 99–117
Osteoclasts, *1984*: Oct., 599–600, 615
Osteocytes, *1984*: Oct., 599–600
evaluation of by light microscopy, for metabolic bone disease, *1984*: Oct., 618
Osteodystrophy, renal. See *Renal osteodystrophy.*
Osteogenesis, definition of, *1984*: Oct., 597
electrically induced, by direct current, *1984*: Jan., 33–34
symposium on, *1984*: Jan., **1–179**
Osteogenesis imperfecta, bracing and splinting for, *1984*: Oct., 785, 786
chemical abnormalities in, *1984*: Oct., 662–663
classification of, *1984*: Oct., 775–776, 779, 780
collagen in, *1984*: Oct., 776–778, 780
diet for, *1984*: Oct., 783–784
drugs for, *1984*: Oct., 783–784
genetic patterns in, *1984*: Oct., 775, 776
histology of, *1984*: Oct., 779, 781, 782
physical therapy for, *1984*: Oct., 784–785
radiographic findings in, *1984*: Oct., 781–783
surgery for, *1984*: Oct., 785–790
treatment of, *1984*: Oct., **775–790**
Osteoid, *1984*: Oct., 602–606
definition of, *1984*: Oct., 620

Osteoid *(Continued)*
evaluation of by light microscopy, for metabolic bone disease, *1984*: Oct., 620
Osteolysis, post-traumatic, of acromioclavicular joint, *1983*: Jan., 94–95
Osteomalacia, as manifestation of renal osteodystrophy, *1984*: Oct., 691
causes of, *1984*: Oct., 712, 714
chemical abnormalities in, *1984*: Oct., 663–666
clinical presentation of, *1984*: Oct., 680–681
definition of, 1983: Jan., 65–66
disorders included in, *1984*: Oct., 613–614
due to hypophosphatemia, chemical abnormalities in, *1984*: Oct., 665
due to vitamin D metabolism disorders, chemical abnormalities in, *1984*: Oct., 664–665
evaluation of, *1984*: Oct., 681–684
fractures in, *1984*: Oct., 636–637
histologic and histomorphometric hallmarks of, *1984*: Oct., 628
in uremia, *1984*: Oct., 691
osteoporosis and, clinical-pathologic differences between, *1984*: Oct., 713
postmenopausal, vertebral deformities in, *1984*: Oct., 636
radiography of, *1983*: Jan., 77–78
rickets and, etiologic classification of, *1984*: Oct., 674
vitamin D and rickets and, *1984*: Oct., **671–686**
Osteomyelitis, *1983*: Jan., 246–247
adult, categories of, *1984*: July, 481
anaerobic, anaerobic septic arthritis and, *1984*: July, **505–516**
diagnosis and treatment of, *1984*: July, 507–510
fracture treatment and, relationship between, *1984*: July, 507–508
bone infarction versus, in children, scintigraphic differentiation of, *1984*: July, 408
causative organisms in, *1984*: July, 481
cellulitis versus, scintigraphic differentiation of, *1984*: July, 407–408
chronic, management of, vascularized bone segment transfers for, *1984*: July, **461–472**
indications for, *1984*: July, 464
results with, *1984*: July, 464–471
with muscle flap, *1984*: July, **451–459**
indications for, *1984*: July, 451–453
of long bones, treatment of, *1984*: July, 435–438
common microorganisms in, antibiotic treatment of, *1984*: July, 558–560
CT in, *1983*: Jan., 227
hematogenous, acute, scintigraphic detection of, *1984*: July, 406–408
of femur and tibia, incidence of, *1984*: July, 482
Osteomyelitis, hematogenous *(Continued)*
soft tissue sepsis versus, in children, differentiation of by technetium-gallium scanning, *1984*: July, 408
in nonunion of femur and tibia, incidence of, *1984*: July, 482
in united fracture of femur and tibia, incidence of, *1984*: July, 482
Klebsiella pneumoniae in, *1983*: Jan., 24
management of, vascularized muscular and musculocutaneous flaps for, *1984*: July, **473–480**
flap selection in, *1984*: July, 474
indications for, *1984*: July, 473–474
recipient vessels and vasculature evaluation for, *1984*: July, 474–475
results with, *1984*: July, 475–478
nonunion with, treatment of, *1984*: Jan., 121–122
postoperative, of femur and tibia, incidence of, *1984*: July, 482
scintigraphic detection of, *1984*: July, 408–411
post-traumatic, open cancellous bone grafting for, *1984*: July, 427–440
scintigraphic detection of, *1984*: July, 408–411
Pseudomonas aeruginosa in, *1983*: Jan., 24
pyogenic, in Gaucher's disease, *1984*: Oct., 769
radiography of, *1983*: Jan., 21–37
Staphylococcus aureus in, *1983*: Jan., 24
vertebral, in child, *1982*: July, 598
Osteonecrosis, *1983*: Jan., 109–116
after surface replacement arthroplasty of hip, *1982*: Oct., 700–701
in Cushing's disease, *1984*: Oct., 707
Osteopenia, *1983*: Jan., **65–80**
causes of, *1984*: Oct., 631
diagnosis of, qualitative methods for, *1984*: Oct., 632–644
quantitative methods for, *1984*: Oct., 644–648
fractures most commonly associated with, *1984*: Oct., 712, 715, 721
generalized, evaluation of, radiologic methods of, *1984*: Oct., **631–651**
in adults, causes of, *1984*: Oct., 681–682
systemic, causes of, *1984*: Oct., 713
Osteopetrosis, chemical abnormalities in, *1984*: Oct., 668
Osteoporosis, *1984*: Oct., **711–728**. See also under specific disorders.
chemical abnormalities in, *1984*: Oct., 660–663
clinical presentation of, *1984*: Oct., 718
definition of, *1984*: Oct., 660, 711–716
diagnosis of, *1984*: Oct., 718, 720–723
due to Cushing's syndrome, characteristics of, *1984*: Oct., 639

Osteoporosis *(Continued)*
due to long-term steroid therapy, characteristics of, *1984*: Oct., 639
electrical treatment of, *1984*: Jan., 23–24
endocrinologic, chemical abnormalities in, *1984*: Oct., 661–662
histologic and histomorphometric hallmarks of, *1984*: Oct., 628
in Cushing's disease, *1984*: Oct., 707, 708
malignancy-associated, chemical abnormalities in, *1984*: Oct., 663
menopause and, *1984*: Oct., 717
osteomalacia and, clinical-pathologic differences between, *1984*: Oct., 713
pathophysiology of, *1984*: Oct., 716–718, 719, 720
postmenopausal, chemical abnormalities in, *1984*: Oct., 661
radionuclide scanning, in, *1984*: Oct., 643
radiographic spinal changes as evidence of, *1984*: Oct., 632–634
radiography of, *1983*: Jan., 74–76
role of nutrition in, *1984*: Oct., 716–717
senile, radionuclide scanning in, *1984*: Oct., 643
vertebral deformities in, *1984*: Oct., 636
treatment of, *1984*: Oct., 723–726
with sodium fluoride and calcium, effects of on vertebral fracture incidence and bone histomorphometry, *1984*: Oct., **729–745**
vertebral fractures due to, *1984*: Oct., 711–712
Osteoprogenitor cells, *1984*: Oct., 599, 600
Osteostim 2000, *1984*: Jan., **47–59**
operation for implantation of, *1984*: Jan., 164–166
Osteotomy, for malalignment of weight-bearing joints, in Paget's disease, *1984*: Oct., 762
tibial, complications of, *1982*: Jan., 14
contraindications to, *1982*: Jan., 4–5
patients suitable for, *1982*: Jan., 4
proximal, *1982*: Jan., **3–16**
trochanteric, for surface replacement arthroplasty, *1982*: Oct., 748–749
radiography of, *1983*: Jan., 174
Overuse injuries, in children athletes, *1983*: April, **337–360**
Oxford knee, design of, *1982*: Jan., 81–83
fixation of tibial components, *1982*: Jan., **65–87**
Oxygen, hyperbaric, after replantation, *1983*: Oct., 884
Oxygen consumption, formula for, *1983*: April, 463
maximal, in handicapped, *1983*: April, 307

Paget's disease, *1983*: Jan., **3–19**
Paget's disease *(Continued)*
arthritis in, *1984*: Oct., 751–752
treatment of, *1984*: Oct., 760–762
bone pain in, *1984*: Oct., 751–752
bone scintigraphy in, *1983*: Jan., 249
chemical abnormalities in, *1984*: Oct., 667
clinical presentation of, *1984*: Oct., 749–755, 758
current concepts of, *1984*: Oct., **747–763**
definition of, *1984*: Oct., 747–748
diagnosis of, *1984*: Oct., 615
epidemiology of, *1984*: Oct., 748
etiology of, *1984*: Oct., 748
fractures in, treatment of, *1984*: Oct., 760
histologic and histomorphometric hallmarks of, *1984*: Oct., 628
laboratory findings in, *1984*: Oct., 756
malalignment of weight-bearing joints in, treatment of, *1984*: Oct., 762
neurologic complications in, *1984*: Oct., 753
orthopedic surgical procedures for, *1984*: Oct., 760–762
pathology and pathophysiology of, *1984*: Oct., 748–749, 750, 751, 752
radiographic findings in, *1984*: Oct., 756, 758
skeletal deformities in, *1984*: Oct., 752, 754
therapeutic agents for, *1984*: Oct., 758, 759–760
treatment of, *1984*: Oct., 756–762
indications for, *1984*: Oct., 757–759
woven bone in, *1984*: Oct., 619
Paget's sarcoma, *1983*: Jan., 14
Pain, bone. See *Bone pain.*
chronic. See *Chronic pain.*
chronic low back. See *Low back, pain in, chronic.*
desensitization procedures for, *1983*: Oct., 695–696, 867–868
in back, radiographic studies of, *1983*: Jan., **119–145**
in hand, office diagnosis and treatment of, *1982*: July, **477–495**
in neck, evaluation and treatment of, *1982*: July, **439–452**
psychosomatic, *1983*: July, 528–531
referred, from lumbar spine, *1983*: July, 487–488
shoulder, evaluation and management of, *1982*: July, **453–475**
spinal, radiographic studies of, *1983*: Jan., **119–145**
wrist. See *Wrist, painful.*
Palmar flexion intercalated segmental instability. See *PISI.*
Paltrinieri-Trentani hip joint resurface arthroplasty, *1982*: Oct., **857–867**
Paraffin bath, *1982*: July, 580
Parathyroid function tests, for metabolic bone disease, *1984*: Oct., 657–659
Parathyroid hormone, *1984*: Oct., 697–698

Parrot beak meniscal tear, *1982*: April, 394
Patella, problems of, arthroscopic surgery for, *1982*: April, **407–413**, 417–418
resurfacing of, *1982*: Jan., 29, 31, 94, 96
Patellar tendon arthroscopic technique, *1982*: April, **349–362**
Patellofemoral joint, disorders of, biomechanics of knee rehabilitation in, *1983*: April, **397–402**
Patellofemoral joint reaction force, equation for, *1983*: April, 399
Patellofemoral stress syndrome, *1983*: April, 353–354
Pavlik harness, *1982*: July, 608–609, 611, 616–617
PCA knee, *1982*: Jan., **103–122**
cementless fixation of, *1982*: Jan., 121–122
design of, *1982*: Jan., 107–109, 111
kinematics of, *1982*: Jan., 111–112
Pedicle flaps, for reconstruction of fingertips and perionychium, *1983*: Oct., 683–688
Pelvis, fracture of, angiography of, *1983*: Jan., 263–267
Paget's disease of, *1983*: Jan., 11
radiographic and clinical manifestations of, *1984*: Oct., 758
PEMFs. See *Pulsing electromagnetic fields.*
Penicillins, for orthopedic infections, *1984*: July, 551–553
Percutaneous musculoskeletal biopsy, radiologically guided, *1983*: Jan., **233–241**
Perilunate dislocation(s), treatment of, *1984*: April, 243–253
Perilunate instability, progressive, *1984*: April, 213–214
Perineural fibrosis, treatment of, *1983*: Oct., 744–746
Perionychium, anatomy of, *1983*: Oct., 675–677
injury to, treatment of, *1983*: Oct., 689, 694–695
Periosteum, response of to solitary lesions, *1983*: Jan., 46–55
Peripheral nerve root entrapment, symptoms of, *1983*: July, 512
Peritendinitis calcarea, of glenohumeral joint, *1983*: Jan., 89–90
Peroneal nerve palsy, after osteotomy, *1982*: Jan., 14
PET scanning. See *Emission computed tomography.*
Phlebitis, prophylaxis in osteotomy, *1982*: Jan., 13
Phosphagen system, *1983*: April, 459
Photodensitometry, radiographic, for diagnosis of osteoporosis, *1984*: Oct., 722
for measurement of bone density, *1984*: Oct., 644–645
Photoplethysmography, for postreplantation monitoring, *1983*: Oct., 886
Physical examination, for sports participation, *1983*: April, 323–328
Physical modalities, effective use of, *1982*: July, **579–586**
Physically disabled. See *Handicapped.*
Physical therapist, evaluation of spinal dysfunction by, *1983*: July, 517–519
role of before and after lumbar spine surgery, *1983*: July, **649–659**
Pickup test, *1983*: Oct., 771–772
Piezoelectricity, *1984*: Jan., 5
PISI, roentgenographic characteristics of, *1984*: April, 186–187
Pisiform, in painful injured wrist, examination of, *1984*: April, 294
Pisotriquetral joint, in painful injured wrist, examination of, *1984*: April, 294
Pivot shift test, *1982*: July, 505, 507
Plantar warts, *1982*: July, 517
Plastazoate, shoe inserts made of, *1982*: July, 523–524
for runners, *1982*: July, 551–553
Plica, medial patellar, pathologic, *1982*: April, **307–312**
Plyometrics, *1983*: April, 440
Pneumococci, antimicrobial resistance and, *1984*: July, 419–420
Polyamides, use in surface replacement arthroplasty of hip, *1982*: Oct., 711
Polyethylene, high-density, use in conservative total hip arthroplasty, *1982*: Oct., 834–835
in surface replacement arthroplasty of hip, unsuitability of, *1982*: Oct., 799
ultrahigh molecular weight, for surface replacement arthroplasty of hip, *1982*: Oct., 683–684, 714
Polymethylmethacrylate, in knee arthroplasty, disadvantages of, *1982*: Jan., 141–142
in surface replacement arthroplasty, problems with, *1982*: Oct., 723, 898
Polytetrafluoroethylene (PFTE), use of in surface replacement arthroplasty of hip, *1982*: Oct., 714
Portals, location of, in patellar tendon technique, *1982*: April, 352–353, 358–359
"Position of dysfunction," of hand, *1983*: Oct., 755
"Position of protection," of hand, *1983*: Oct., 781–782
"Position of rest," of hand, *1983*: Oct., 755–756
Posterior cruciate ligament, retention of in arthroplasty, *1982*: Jan., 93–94
Posterior drawer test, *1982*: July, 507–508
Pregame meal, *1983*: April, 395–396
Progressive relaxation, *1983*: April, 384
Prosthesis(es), hip, double-cup. See *Surface replacement arthroplasty, of hip.*

Prosthesis(es) *(Continued)*
infection of, etiology of, *1984*: July, 491–494
lower extremity, problems of patient with, *1982*: July, **569–578**
Prosthetic component, aseptic loosening of, low-grade periprosthetic sepsis versus, scintigraphic differentiation of, *1984*: July, 409, 410
Proteins, noncollagenous, in bone, *1984*: Oct., 604–606
Proximal interphalangeal joint, capsulectomy of, *1983*: Oct., 735–737, 739
Pseudarthrosis, congenital. See *Congenital pseudarthrosis*.
factors affecting prognosis in, *1984*: Jan., 146, 148
further fracture in, *1984*: Jan., 150
spinal, *1983*: Jan., 142, 144
Pseudoboutonniere deformity, *1983*: Oct., 804–805
Pseudofracture(s), in Paget's disease, treatment of, *1984*: Oct., 760
radiographic appearance of, *1983*: Jan., 77–78
Pseudomonas aeruginosa, in osteomyelitis, *1983*: Jan., 24
Pseudo-osteomyelitis, in Gaucher's disease, *1984*: Oct., 769
Psychological evaluation, of chronic pain patient, *1983*: July, 520–521, **527–538**
Pulsing electromagnetic fields, compatibility of with internal fixation devices, *1984*: Jan., 80–81
for congenital pseudarthrosis, application of coils in, *1984*: Jan., 151, 152
studies of, *1984*: Jan., 155–157
tibial, *1984*: Jan., **143–162**
for ununited fractures and arthrodeses, *1984*: Jan., **61–88**
improvement of local blood supply by, *1984*: Jan., 79–80
specific actions of different pulses of, *1984*: Jan., 79
use of bone grafts with, *1984*: Jan., 80
Pyogenic spondylitis, *1983*: Jan., 23

Quadriceps force, in standing flexion, equation for, *1983*: April, 398
Quadriplegia, C5–C6, surgical treatment of hands in patient with, *1983*: Oct., **893–904**
classification of, *1983*: Oct., 893–894

Radial collateral ligament, anatomy of, *1984*: April, 210
Radial deviation, carpal components and, *1984*: April, 200–202
Radial nerve, anatomy of, *1984*: April, 280
Radial styloid, *1984*: April, 194, 196
in painful injured wrist, examination of, *1984*: April, 291, 293–294
osteoarthritis in, dorsal intercalated segment collapse and, *1984*: April, 204–205
Radiocapitate ligament, anatomy of, *1984*: April, 209–210
role of, *1984*: April, 200
Radiofrequency facet denervation, *1983*: July, **569–575**
Radiogrammetry, for measurement of bone density, *1984*: Oct., 644
Radiography, for diagnosis of osteopenia, *1984*: Oct., 632–639, 640
for evaluation of chronic wrist pain, *1984*: April, 185–188
in detection of loose knee arthroplasty, *1982*: Jan., 228, 230
in evaluation for proximal tibial osteotomy, *1982*: Jan., 6
in evaluation of knee arthroplasty, *1982*: Jan., **225–244**
of fractured metal knee replacement, *1982*: Jan., 233, 235
of glenohumeral joint, *1983*: Jan., 82–85
of hand fractures, *1983*: Oct., 779–781
of hip, in newborn infant, controversy over, *1982*: July, 615
of osteomyelitis, *1983*: Jan., **21–37**
of osteogenic spine, *1983*: Jan., 72–74
of total joint replacement, *1983*: Jan., **171–191**
orthopedic, symposium on, *1983*: Jan., **1–291**
Radionuclide bone scanning, for diagnosis and evaluation of generalized osteopenia, *1984*: Oct., 639, 641–644
in knee arthroplasty, *1982*: Jan., 240–241
in postmenopausal osteoporosis, *1984*: Oct., 643
in primary hyperparathyroidism, *1984*: Oct., 643
in senile osteoporosis, *1984*: Oct., 643
of arthritic knee, *1982*: Jan, 227
of stress fracture after knee arthroplasty, *1982*: Jan., 235, 237
Radionuclides, for detection and evaluation of musculoskeletal sepsis, *1984*: July, 401–416
in musculoskeletal sepsis, miscellaneous uses of, *1984*: July, 411–412
localization of, mechanisms of, *1984*: July, 401–404
Radioscaphoid ligament, anatomy of, *1984*: April, 209, 210
Radiotriquetral ligament, anatomy of, *1984*: April, 209, 210
Radioulnar joint, distal, *1984*: April, **321–335**

Radioulnar joint, distal *(Continued)*
anatomy of, *1984*: April, 321–322, 323–324
biomechanics of, *1984*: April, 322, 325
congruity of, evaluation of by CT, *1984*: April, 190
disorders of, roentgenographic characteristics of, *1984*: April, 188
in painful injured wrist, examination of, *1984*: April, 292–293
kinematics of, *1984*: April, 322, 325
kinetics of, *1984*: April, 325
problems in, diagnosis of, *1984*: April, 325–328
treatment of, *1984*: April, 328, 330–334
Radius, distal, articular fractures of, *1984*: April, **217–236**
classification of, *1984*: April, 221–223
displacement patterns in, *1984*: April, 219–220
articular surface of, *1984*: April, 194, 196, 338–339
nonunion of, *1984*: Jan., 102
shortening of, for Kienböck's disease, *1984*: April, 361–362
Raney flexion jacket, *1982*: July, 430
Reattachment. See *Replantation*.
Rectus femoris muscle, flap of, for soft tissue defects of hip, *1984*: July, 443
Reduction, of distal radial articular fractures, accuracy of, *1984*: April, 223–224
Regeneration, of tissue, electrical stimulation of, *1984*: Jan., 23
Rehabilitation, after athletic injury, *1983*: April, 406–407
after hand surgery, symposium on, *1983*: Oct., **673–927**
of burned arm, *1983*: Oct., **699–718**
of fractured hand, *1983* Oct., 788–791
Renal disease, histologic manifestations of bone disease in, *1984*: Oct., 692–693
Renal insufficiency, metabolic disturbances in, *1984*: Oct., 687–691
Renal osteodystrophy, *1984*: Oct., **687–695**
chemical abnormalities in, *1984*: Oct., 666–667, 691–692
osteomalacia as manifestation of, *1984*: Oct., 691
radiographic abnormalities in, *1984*: Oct., 638–639
Replantation, Doppler ultrasound monitoring of, *1983*: Oct., 886
of upper extremity, *1983*: Oct., **873–891**
Resection arthroplasty, for failed knee replacement, *1982*: Jan., 223
Reserpine, for reflex sympathetic dystrophy, *1982*: July, 489
Resistance, to antimicrobial agents, genetic basis of, *1984*: July, 418
Retrolisthesis, surgery for, *1983*: July, 583–584
Rheumatoid arthritis, in carpometacarpal joints, *1984*: April, 267–268
of thumb carpometacarpal joint, *1984*: April, 275
of wrist, severe, approach to, *1984*: April, **369–380**
Rickets, clinical presentation of, *1984*: Oct., 676–679
differential diagnosis of, 679 *1984*: Oct., 679
evaluation and treatment of, *1984*: Oct., 679–680
osteomalacia and, etiologic classification of, *1984*: Oct., 674
radiography of, *1983*: Jan., 77; *1984*: Oct., 637
vitamin D and osteomalacia and, *1984*: Oct., **671–686**
Ring finger, amputation of, and amputation of middle finger, *1983*: Oct., 863–865
Rods, intramedullary, for osteogenesis imperfecta, *1984*: Oct., 785–790
Rotator cuff, tear of, *1983*: Jan., 90–92
arthrogram of, *1983*: Jan., 206–208
tendinitis of, *1982*: July, 471–473
Running, injuries in, evaluation and treatment of, *1982*: July, **541–558**
strength training for, *1983*: April, 444–445

Sacroiliitis, use of CT in, *1983*: Jan., 227–228
Scaphoid, avascular necrosis of, *1984*: April, 390
dislocation of, treatment of, *1984*: April, 253–254
fractures of, *1984*: April, 237–240
classification of, *1984*: April, 382–383
with DISI deformity, treatment of, *1984*: April, 301–302
nonunion of, *1984*: Jan., 117
as complication of intercarpal dislocations and fracture-dislocations, *1984*: April, 254, 255
avascular necrosis and, *1984*: April, **381–391**
bone grafting for, *1984*: April, 383–389
D.C. treatment of, *1984*: Jan., **107–112**
implantable, *1984*: Jan., 53–54
degenerative changes in, *1984*: April, 341, 344
roentgenographic characteristics of, *1984*: April, 188
in SLAC wrist, *1984*: April, 338–341
replacement of, for SLAC wrist, *1984*: April, 344–349
Scapholunate dissociation, demonstration of, during physical examination, *1984*: April, 185
roentgenographic characteristics of, *1984*: April, 186–187

Scapholunate dissociation *(Continued)*
treatment of, *1984*: April, 242–243
with distal radial articular fractures, *1984*: April, 230–231
Scapholunate instability, *1984*: April, 214–215
treatment of, *1984*: April, 302–303, 304
Scapholunate joint, dissociation of. See *Scapholunate dissociation.*
ligamentous anatomy of, *1984*: April, 210, 211
Scapholunate ligament, in painful injured wrist, examination of, *1984*: April, 292
perforation of, identification of, arthrography for, *1984*: April, 189
role of, *1984*: April, 199–200
Scar contracture, after burn, *1983*: Oct., 708–709
Scheuermann's disease, *1982*: July, 594–596; *1983*: Jan., 104–106
Schmorl's nodes, *1982*: July, 595–596; *1983*: Jan., 73–74, 105–106, 125–127
Scintigraphy, bone, *1983*: Jan., **243–256**
in evaluation of chronic wrist pain, *1984*: April, 189
in evaluation of neck pain, *1982*: July, 441, 448–449
definition of terms in, *1984*: Jan., 126
for evaluation of musculoskeletal sepsis, *1984*: July, **401–416**
of total hip replacement, *1983*: Jan., 181–183
of total knee replacement, *1983*: Jan., 185
technetium and gallium, in ununited long bone fractures, *1984*: Jan., **125–130**
Sclerosis, discogenic, *1983*: Jan., 127–130
with coexistent nondiscogenic sclerosis, *1983*: Jan., 133–135
spinal, focal, *1983*: Jan., 135–137
nondiscogenic, *1983*: Jan., 131–133
Segmental avascular necrosis, surface replacement arthroplasty in, *1982*: Oct., 735
Sepsis. See also *Infection.*
low-grade periprosthetic, aseptic prosthetic component loosening versus, scintigraphic differentiation of, *1984*: July, 409, 410
musculoskeletal. See *Musculoskeletal sepsis.*
soft tissue, hematogenous osteomyelitis versus, in children, differentiation of by technetium-gallium scanning, *1984*: July, 408
Sever's disease, *1982*: July, 653; *1983*: Jan., 100–101
Shoe, inserts for, *1982*: July, 520–521
for runner, *1982*: July, 557–558
prescription for, *1982*: July, 521, 522
Shoulder, anatomy of, *1983*: Jan., 203–204
arthrography of, *1983*: Jan., 204–211
arthroplasty of, total, infected, management of, *1984*: July, 500
Shoulder *(Continued)*
arthroscopy of, *1982*: April, 420
for removal of loose body, *1982*: April, 327
overuse injuries to, in child, *1983*: April, 348–349
pain in, evaluation and management of, *1982*: July, **453–475**
radiographic examination for, *1983*: Jan., 81–97
Shoulder replacement, radiography of, *1983*: Jan., 187–188
Sinography, in knee arthroplasty, *1982*: Jan., 239
Skeleton, deformities of, in Paget's disease, *1984*: Oct., 752, 754
Skull, Paget's disease of, *1983*: Jan., 9
radiographic and clinical manifestations of, *1984*: Oct., 758
"salt and pepper," in hyperparathyroidism, *1984*: Oct., 701, 702
SLAC procedure, *1984*: April, 344–349
SLAC wrist, *1984*: April, 337, 338–349
triscaphe degenerative arthritis and, *1984*: April, 337–338, 351, 352
Slow twitch fibers. See *Muscle fiber.*
Smith-Petersen, development of hip replacement by, *1982*: Oct., 661, 711
"Snapping hip," *1983*: April, 352
Snuffbox, in painful injured wrist, examination of, *1984*: April, 291
ulnar, in painful injured wrist, examination of, *1984*: April, 293
Socket and cup surface replacement, of hip, *1982*: Oct., **843–856**
Sodium fluoride, for osteoporosis, *1984*: Oct., 724–725
calcium and, for osteoporosis, effects of on vertebral fracture incidence and bone histomorphometry, *1984*: Oct., **729–745**
Soft tissue, of lower extremity, defects of, muscle flaps for, *1984*: July, 442–448
repair and remodeling of, electrical stimulation in, *1984*: Jan., 24–25
Soft tissue infections, in orthopedic surgery, antibiotic treatment of, *1984*: July, 561
Soleus muscle, flaps of, for soft tissue defects of upper and middle thirds of tibia, *1984*: July, 446–447
Spherocentric knee, *1982*: Jan., **173–186**
Spinal fusion, failed, PEMFs for, *1984*: Jan., 83–84
lumbosacral, implantable D.C. in, *1984*: Jan., 55–56
Spinal pain. See *Low back, pain in.*
Spinal root compression syndromes, liquid crystal thermography in, *1983*: Jan., **271–288**
Spinal stenosis, central, *1983*: July, 499–500
CT of, *1983*: Jan., 154–155, 157; July, 544, 545, 546

Spinal stenosis *(Continued)*
degenerative, anatomy of, *1983*: July, 508
developmental, anatomy of, *1983*: July, 507–508
lateral, *1983*: July, 497–499
symptoms of, *1983*: July, 511–512
Spine, central and lateral canals of, anatomy of, *1983*: July, 492
cervical, nonunion of, *1984*: Jan., 115–116
degeneration of, clinical stages of, *1983*: July, 502–503, 579
dual-photon absorptiometry of, *1984*: Oct., 646
dysfunction of, evaluation of by physical therapist, *1983*: July, 517–519
fixed deformity of, stage III, surgery for, *1983*: July, 584–585
instability of, chronic, diagnosis and treatment of, *1983*: July, 513
rotational, surgery for, *1983*: July, 580–581
transitional, surgery for, *1983*: July, 582–583
lumbar, anatomy of, relation of to function and pain, *1983*: July, **475–489**
CT of, *1983*: Jan., **147–169**
degenerative disease of, pathophysiology of, *1983*: July, **491–504**
disease of, classification of, *1983*: July, **505–515**
distribution of referred pain from, *1983*: July, 487–488
motion of, technique for assessing, *1983*: July, **628–631**
neuroanatomy of, *1983*: July, 486–487
problems of, evaluation and care of, symposium on, *1983*: July, **475–671**
surgery of, role of physical therapist before and after, *1983*: July, **649–659**
muscles of, *1983*: July, 482, 484–485
osteomyelitis of, *1983*: Jan., 29
osteopenic, radiography of, *1983*: Jan., 72–74
overuse injuries of, in child, *1983*: April, 347–348
Paget's disease of, *1983*: Jan., 11
radiographic and clinical manifestations of, *1984*: Oct., 758
painful, radiographic studies of, *1983*: Jan., **119–145**
pseudarthrosis of, *1983*: Jan., 142, 144
radiographic changes in, as evidence of osteoporosis, *1984*: Oct., 632–634
soft tissue incompetence syndrome of, *1983*: July, 514
surgery of, indications for, *1983*: July, 578–579
thoracolumbar, nonunion of, treatment of, *1984*: Jan., 116
tumor of, in child, *1982*: July, 600–602
Splinting, for osteogenesis imperfecta, *1984*: Oct., 785, 786
for stiff hand, *1983*: Oct., 761–762
position of, for crushed upper limb, *1983*: Oct., 720–721
Spondylolisthesis, degenerative, *1983*: July, 497
in adolescent, *1983*: July, 509
in child, *1982*: July, 593
Spondylolysis, hypoplastic neural arch complex and, *1983*: Jan., 137, 140
in child, *1982*: July, 502
signs and symptoms of, *1983*: July, 512–513
Spondylosis, multilevel, *1983*: July, 500
Sports, participation in, factors contributing to aversion to, *1983*: April, 362–363
loss of interest in, role of parents in, *1983*: April, 363–366
physical examination for, *1983*: April, 298, 323–328
return to after injury, *1983*: April, **317–321**
Sports attitude inventory, *1983*: April, 370–371
Sports medicine, arthroscopic surgery in, *1982*: April, **415–421**
special considerations in, symposium on, *1983*: April, **293–471**
Sports Medicine Council, development and functions of, *1983*: April, **295–299**
Sprain, finger, *1983*: Oct., 800
"Spring" sign, *1982*: April, 340
Staphylococcus(i), antimicrobial resistance and, *1984*: July, 420
Staphylococcus aureus, osteomyelitis caused by, *1983*: Jan., 24
Steinmann pin, placement of in osteotomy, *1982*: Jan., 9
Stenosis, spinal. See *Spinal stenosis*.
Sternoclavicular joint, dislocation of, *1983*: Jan., 96
septic arthritis of, *1983*: Jan., 96
Steroids, intrathecal injection of in back pain, *1983*: July, 564
long-term therapy with, osteoporosis due to, characteristics of, *1984*: Oct., 639
Stiffness, in hand, after fracture, *1983*: Oct., 784–785
management of, *1983*: Oct., **749–765**
in joints, after crush injury, *1983*: Oct., 733–735
Strangulation injury, of muscle, *1983*: Oct., 725–726
Streaming potential, *1984*: Jan., 8
Strength, gains of, in athlete, *1983*: April, 431–432
Strength training, *1983*: April, 436–438
for basketball, *1983*: April, 442
for field events, *1983*: April, 445
for football, *1983*: April, 442–443
for gymnastics, *1983*: April, 443

Strength training *(Continued)*
for running, *1983*: April, 444–445
for swimming, *1983*: April, 443–444
for wrestling, *1983*: April, 446
types of, *1983*: April, **449–458**
Streptococci, enterococcal group D, antimicrobial resistance and, *1984*: July, 420–421
Stress fracture, after knee arthroplasty, bone scan of, *1982*: Jan., 235, 237
in child, *1983*: April, 344–345
Subluxation, dislocation and, of acromioclavicular joint, *1983*: Jan., 93
of finger joint, *1983*: Oct., 802
patellar, arthroscopic findings in, *1982*: April, 411–412
Sudek's atrophy, Colles' fracture and, *1984*: April, 281–282
Sudomotor function, testing of, *1983*: Oct., 770
Superficial radial nerve, compression of, *1982*: July, 483
Surface replacement arthroplasty, of hip, advantages and disadvantages of, *1982*: Oct., 896–897
attachment of trochanter after, *1982*: Oct., 758
avascular necrosis after, *1982*: Oct., 762–763, 765, 794–795
biologic ingrowth fixation, *1982*: Oct., 723–724
biomaterial aspects of, *1982*: Oct., **709–728**
bone-cement radiolucency in, significance of, *1982*: Oct., 766
bone scan in, *1982*: Oct., 780–782
capsulotomy in, *1982*: Oct., 749–750
cementing of acetabulum in, *1982*: Oct., 756–758
cementless, *1982*: Oct., **843–856**
choice of materials in, *1982*: Oct., 681–683
complications of, *1982*: Oct., **761–775**
conversion to conventional total hip replacement, *1982*: Oct., 785
dislocation after, *1982*: Oct., 770–771
ectopic bone formation after, *1982*: Oct., 769–770
fracture of femoral neck after, *1982*: Oct., 702, 768, 795
implications of larger diameter, *1982*: Oct., 721–722
indications for and contraindications to, *1982*: Oct., **729–737**
infection after, *1982*: Oct., 773–774
loosening of components in, *1982*: Oct., 703, 723, 765–768, 795
wear debris causing, *1982*: Oct., 691–692
osteonecrosis following, *1982*: Oct., 700–701
Surface replacement arthroplasty, of hip *(Continued)*
patient selection for, *1982*: Oct., 731–732
postoperative management of, *1982*: Oct., 759
salvage of, *1982*: Oct., **777–787**
surgical approaches for, *1982*: Oct., **739–746**
symposium on, *1982*: Oct., **659–923**
trochanteric osteotomy for, *1982*: Oct., 748–749
unsuitability of, *1982*: Oct., 799–800
types of, *1982*: Oct., 716–718
wear behavior, Charnley's equation for, *1982*: Oct., 721
wear debris in, *1982*: Oct., 719, 722
Suture, for nerve repair, *1983*: Oct., 768
Swedish System of arthroscopy, *1982*: April, **349–362**
Swimming, strength training for, *1983*: April, 443–444
Synovectomy, arthroscopic, *1982*: April, **399–405**
for rheumatoid wrist disease, *1984*: April, 371–379
Synovial fold, pathologic, *1982*: April, **307–312**
Synovial pseudarthrosis, treatment of, *1984*: Jan., 121
Synovitis, of digital flexor tendons, *1982*: July, 486–487
peripatellar, *1982*: April, 417
Syphilis, osseous involvement in, *1983*: Jan., 33–34

TARA hip replacement, *1982*: Oct., **869–894**
Tarsal coalition, in child, *1982*: July, 652–653
Technetium, *1984*: Jan., 126–128
in scintigraphy, localization of, mechanisms of, *1984*: July, 401–402
three-phase bone scanning with, for musculoskeletal sepsis, utilization and interpretation of, *1984*: July, 404–405
Technetium-gallium scan(s), for musculoskeletal sepsis, utilization and interpretation of, *1984*: July, 405–406
in differentiation of hematogenous osteomyelitis from soft tissue sepsis in children, *1984*: July, 408
Tendinitis, in child athlete, *1983*: April, 346
of flexor carpi ulnaris, *1982*: July, 487
of rotator cuff, *1982*: July, 471–473
Tendon. See specific tendon.
Tendon adhesion, in hand, treatment of, *1983*: Oct., 741–742
Tendon entrapment, after hand fracture, *1983*: Oct., 787–788
Tenolysis, after flexor tendon repair, *1983*: Oct., 844–845
TENS, for low back pain, *1983*: July, 633–634

TENS, for low back pain *(Continued)*
postsurgical, *1983*: July, 651
presurgical, *1983*: July, 650
Tetracycline, in dynamic histomorphometry for diagnosis of metabolic bone disease, *1984*: Oct., 626
THARIES hip resurfacing technique, *1982*: Oct., **813–832**
trochanteric osteotomy in, *1982*: Oct., 816–818
Thenar flap, *1983*: Oct., 687–688
Thermocouple, for postreplantation monitoring, *1983*: Oct., 887
Thermography, liquid crystal, in spinal root compression syndromes, *1983*: Jan., **271–288**
Thigh, soft tissue defects of, muscle flaps for, *1984*: July, 443–447
Thoracolumbar spine, nonunion of, treatment of, *1984*: Jan., 116
Thorn sign, *1982*: July, 626
Three-puncture method of arthroscopy, *1982*: April, **349–362**
Thrombosis, of ulnar artery, due to wrist injury, *1984*: April, 283–284
Thumb, axis of, force transmission to carpus and, *1984*: April, 199
carpometacarpal joint of. See *Carpometacarpal joint(s), of thumb.*
extensor tendon of, injury to, *1983*: Oct., 824–825
Thumb web, reconstruction of, *1983*: Oct., 709–710
Thyroid hormone, *1984*: Oct., 698
Tibia, chronic osteomyelitis of, gastrocnemius flap for, *1984*: July, 453, 455, 456
congenital pseudarthrosis of, implantable direct current for, *1984*: Jan., 56–57
pulsing electromagnetic field treatment of, *1984*: Jan., **143–162**
femur and, infected nonunion of, *1984*: July, **481–490**
treatment of, *1984*: July, 483–488
fractures of, in Paget's disease, treatment of, *1984*: Oct., 760
united, osteomyelitis of, incidence of, *1984*: July, 482
lower third of, soft tissue defects of, muscle flaps for, *1984*: July, 447–448
nonunion of, *1984*: Jan., 92–97, 120–121
infected, vascularized bone transfer for, *1984*: July, 468, 470–471
osteomyelitis of, incidence of, *1984*: July, 482
osteomyelitis of, incidence of, *1984*: July, 482
postoperative, incidence of, *1984*: July, 482
Paget's disease of, *1983*: Jan., 12
radiographic and clinical manifestations of, *1984*: Oct., 758
Tibia *(Continued)*
proximal, osteotomy of, *1982*: Jan., **3–16**
upper and middle thirds of, soft tissue defects of, muscle flaps for, *1984*: July, 443–447
Tinel's sign, advancing, testing for, *1983*: Oct., 770
Tissue, fibrous, in disorders of bone and marrow, *1984*: Oct., 620
osseous, antibiotic distribution in, *1984*: July, 542–543
pathologic features of, in metabolic bone disease, *1984*: Oct., **613–629**
regeneration of, electrical stimulation of, *1984*: Jan., 23
soft. See *Soft tissue.*
Toeing in, in child, *1982*: July, 629–637, 644–645
Toenail, ingrown, *1982*: July, 518
Tomography, computed. See *CT.*
in evaluation of painful injured wrist, *1984*: April, 299–300
trispiral, in evaluation of chronic wrist pain, *1984*: April, 190
Torque, frictional, role in loosening of surface replacement arthroplasty of hip, *1982*: Oct., 687–690
Total condylar knee arthroplasty, *1982*: Jan., **123–130**
Total condylar III knee, *1982*: Jan., 99–100
Total Gym, *1983*: April, 444
Total hip replacement, advantages of surface replacement over, *1982*: Oct., 889–890
after failed surface replacement arthroplasty, *1982*: Oct., 785
arthrography of, *1983*: Jan., 178–179, 181
cement-bone lucency in, *1983*: Jan., 173
change in position of components in, *1983*: Jan., 176–177
conservative, *1982*: Oct., **833–842**
dislocation of, *1983*: Jan., 174–175
fracture in, *1983*: Jan., 182–183
loosening of, *1983*: Jan., 175–176
as normal remodeling response, *1982*: Oct., 889
metal-cement lucency in, *1983*: Jan., 177–178
methylmethacrylate in, radiography of, *1983*: Jan., 173
radiographic appearance of, *1983*: Jan., 171–172
scintigraphy of, *1983*: Jan., 181–183
soft tissue ossification in, *1983*: Jan., 183
Total joint replacement, radiography of, *1983*: Jan., **171–191**
Total knee replacement. See *Knee arthroplasty.*
Trabecular bone, cortical bone and, *1984*: Oct., 614
morphology of, in evaluation for metabolic bone disease, *1984*: Oct., 620–621

Traction, neck and back, therapeutic, *1982*: July, 584
Training, athletic, biochemical results of, *1983*: April, 465–466
correlation of with type of energy used, *1983*: April, 464
of adolescent, *1982*: July, **525–540**
Transcutaneous electrical nerve stimulation. See *TENS*.
Trapezium, in painful injured wrist, examination of, *1984*: April, 291
tuberosity of, in painful injured wrist, examination of, *1984*: April, 294
Trauma. See also *Injury(ies)*.
musculoskeletal, angiography in, *1983*: Jan., 263–269
Traumatic injury, surgical treatment of, anaerobic septic arthritis after, *1984*: July, 512–514
Triangular fibrocartilage, debridement of, *1984*: April, 334
force transmission by ulnar column and, *1984*: April, 194, 197
perforation of, identification of, arthrography for, *1984*: April, 189
Triangular fibrocartilage complex, *1984*: April, 321–322, 323–324
Triangulation, for arthroscopic surgery, principles, *1982*: April, **329–336**
Triquetrohamate arthrodesis, *1984*: April, 333
for midcarpal instability, *1984*: April, 315–316
Triquetrohamate joint, rotational control and, *1984*: April, 198
Triquetrolunate instability, *1984*: April, 311–313, 314
Triquetrolunate junction, in painful injured wrist, examination of, *1984*: April, 292
Triquetrolunate ligament, perforation of, identification of, arthrography for, *1984*: April, 189
treatment of, *1984*: April, 312
Triquetrum, in painful injured wrist, examination of, *1984*: April, 292
Triscaphe arthrodesis, *1984*: April, 348–351
Triscaphe degenerative arthritis, *1984*: April, 337, 348–351
SLAC wrist and, *1984*: April, 351, 352
Trispiral tomography, in evaluation of chronic wrist pain, *1984*: April, 190
Trochanteric osteotomy, in surface replacement arthroplasty, unsuitability of, *1982*: Oct., 799–800
in THARIES hip resurfacing technique, *1982*: Oct., 816–818
Tuberculosis, involvement of in joints, *1983*: Jan., 31–33
Tumor, bone, in Paget's disease, *1983*: Jan., 8
Tumor, bone *(Continued)*
interventional radiologic therapy for *1983*: Jan., 259, 262–263
location of different types, *1983*: Jan., 57–59
malignant, CT of, *1983*: Jan., 218–225
in Paget's disease, *1983*: Jan., 14
spinal canal, in child, *1982*: July, 600–602

Ulna, in painful injured wrist, examination of, *1984*: April, 292–293
lengthening of, for Kienböck's disease, *1984*: April, 361–362
nonunion of, *1984*: Jan., 100, 102
translocation of, roentgenographic characteristics of, *1984*: April, 187–188
Ulnar artery, thrombosis of, due to wrist injury, *1984*: April, 283–284
Ulnar carpal instabilities, *1984*: April, **307–320**
Ulnar deviation, carpal components and, *1984*: April, 200–201
Ulnar nerve, anatomy of, *1984*: April, 279–280
compression of, by ganglia, *1984*: April, 283–284
injury to, in distal radial articular fractures, *1984*: April, 223, 230, 231, 233
wrist injuries and, *1984*: April, 282
surgical exploration of, indications for, *1984*: April, 285–286
"Ulnar snuffbox," in painful injured wrist, examination of, *1984*: April, 293
Ulnar translocation, roentgenographic characteristics of, *1984*: April, 187–188
Ulnar tunnel syndrome, *1982*: July, 482
Ulnar variance, in Kienböck's disease, *1984*: April, 359, 361
Ulnolunate ligament, anatomy of, *1984*: April, 209, 210
Ulnotriquetral ligament, anatomy of, *1984*: April, 209, 210
Ultrahigh molecular weight polyethylene, in knee arthroplasty, deformation of, *1982*: Jan., 35–38
radiography of, *1982*: Jan., 233, 235
in surface replacement arthroplasty of hip, *1982*: Oct., 683–684, 714
Ultrasound, Doppler, for postreplantation monitoring, *1983*: Oct., 886
for measurement of bone density, *1984*: Oct., 648
Uniaxial hinge knee replacement, problems with, *1982*: Jan., 173–174
Unicondylar knee replacement, *1982*: Jan., 98–99
Universal gym, *1983*: April, 434
Universal Total Knee Instrumentation System, *1982*: Jan., 112, 115
Upper extremity. See also *Hand*.

Upper extremity *(Continued)*
burns of, rehabilitation after, *1983*: Oct., **699–718**
crush injury of, management of, *1983*: Oct., **719–747**
replantation of, *1983*: Oct., **873–891**
Urine chemistries, for metabolic bone disease, *1984*: Oct., 655–657

Valgus deformity, of knee, correction of, *1982*: Jan., 19–20, 21, 164
Vancomycin, for orthopedic infections, *1984*: July, 557
Van Neck's disease, *1983*: Jan., 100
Variable Axis knee replacement, *1982*: Jan., **153–172**
Variable resistance exercise, *1983*: April, 453–454
compared with isometric, *1983*: April, 456
compared with isotonic, *1983*: April, 455
Varus deformity, of knee, correction, *1982*: Jan., 18–19, 164
Vastus lateralis muscle, flap of, for soft tissue defects of hip, *1984*: July, 443
Vastus medialis muscle, flap of, for soft tissue defects of knee, *1984*: July, 443
Vegetarian diets, use of by athletes, *1983*: April, 389–390
Verdan's zone system, *1983*: Oct., 828
Vertebra(e), compression fractures of, due to metastases, *1984*: Oct., 635
in diagnosis of osteopenia, *1984*: Oct., 634–635
in Gaucher's disease, *1984*: Oct., 768–769
osteopenic, versus metastatic disease, radionuclide scanning for differentiation of, *1984*: Oct., 641–643
deformities of, in senile or postmenopausal osteoporosis, *1984*: Oct., 636
fractures of, due to osteoporosis, *1984*: Oct., 711–712
incidence of, bone histomorphometry and, effects of osteoporosis treatment with sodium fluoride and calcium on, *1984*: Oct., **729–745**
limbus, *1983*: Jan., 121–122, 125
metastatic disease to, versus osteopenic compression fractures, radionuclide scanning for differentiation of, *1984*: Oct., 641–643
Vibratory test, *1983*: Oct., 773
Video monitor, for arthroscopic surgery, *1982*: April, 286–287
in three-puncture technique, *1982*: April, 361
VISI, radiographic characteristics of, *1984*: April, 295, 296, 318
treatment of, *1984*: April, 303–304, 305
Vitallium, use of in surface replacement arthroplasty of hip, *1982*: Oct., 714
Vitamin D, rickets and osteomalacia and, *1984*: Oct., **671–686**
Vitamin D metabolism, *1984*: Oct., 672–676
disorders of, osteomalacia due to, chemical abnormalities in, *1984*: Oct., 664–665
Vitamin D metabolites, measurement of, for diagnosis of metabolic bone disease, *1984*: Oct., 659–660
Volar capsule, injury to, *1983*: Oct., 802–804
Volar intercalated segment instability. See *VISI*.
Volar pole fracture, *1983*: Oct., 787
Volkmann's contracture, treatment of, *1983*: Oct., 742–744
Vo_2 max, in handicapped, *1983*: April, 307
von Rosen splint, *1982*: July, 607, 608
V-Y advancement flap, for digital tips and perionychium, *1983*: Oct., 695

Wagner surface replacement arthroplasty, *1982*: Oct., **789–797**
avascular necrosis after, *1982*: Oct., 794–795
Walldius, Borje, development of knee arthroplasty by, *1982*: Jan., 173
Warm-up, athletic, *1983*: April, 427–431
Wear debris, as cause of loosening of surface replacement arthroplasty of hip, *1982*: Oct., 691–692
Weber two-point discrimination test, *1983*: Oct., 770–771
Weight gain diet, for athlete, *1983*: April, 394–395
Weightlifting, *1983*: April, 445–446
in athletic training, *1982*: July, 532–534
in muscle function testing, *1983*: April, 319–320
Weight loss diet, for athlete, *1983*: April, 393–394
Weight training, *1983*: April, 432–434
resumption of after injury, *1983*: April, 446–447
Wheelchair athlete. See *Handicapped*.
Whirlpool bath, for fractured hand, *1983*: Oct., 790
for injured hand, contraindications to, *1983*: Oct., 734
Wick catheter, *1983*: Oct., 721–722
Women, weight training for, *1983*: April, 432, 434
Workers' compensation insurance, *1983*: July, **661–668**
physician's role in claims for, *1982*: July, 562–564
Wound botulism, *1983*: Oct., 726

Wrestling, weight training for, *1983*: April, 446
Wringer burn, of hand, contracture after, *1983*: Oct., 707–708
Wrist. See also *Carpus*.
anatomy of, *1983*: Jan., 193–195
arthrography of, *1983*: Jan., 195–202
arthroplasty of, total, infected, management of, *1984*: July, 501
control column of, *1984*: April, 198–199
degenerative arthritis of, *1984*: April, 337–353
extensor muscles of, re-education of following injury, *1983*: Oct., 757–758
extensor tendon of, injury to, *1983*: Oct., 823–824
force-bearing column of, *1984*: April, 194, 196–198
fractures and dislocations of, acute, *1984*: April, **237–258**
fusion of, partial, for rheumatoid arthritis, *1984*: April, 371–374
total, for rheumatoid arthritis, *1984*: April, 374–377
injuries to, cause of, *1984*: April, 212
ulnar artery thrombosis and, *1984*: April, 283–284
ulnar nerve injuries and, *1984*: April, 282
kinematics of, *1984*: April, 200–202, 309–311
ligaments of, *1984*: April, 371–372, 373
anatomy of, *1984*: April, 209–211, 308–309
pathogenesis of carpal instability and, *1984*: April, **209–216**
Wrist, ligaments of, *(Continued)*
articular fractures of distal radius and, *1984*: April, 220–221
biomechanics of, *1984*: April, 211–213
injury to, *1984*: April, 213–215
instability of, radiographic demonstration of, *1984*: April, 296–298
neural anatomy of, *1984*: April, 279–280
painful, after injury, accurate evaluation and management of, *1984*: April, **289–306**
radiographic examination of, *1984*: April, 294–298
surgical exploration of, *1984*: April, 300–301
chronic, differential diagnosis of, *1984*: April, 184
evaluation of, *1984*: April, **183–192**
dorsal aspect of, accurate examination of, *1984*: April, 291–293
palmar aspect of, accurate examination of, *1984*: April, 293–294
rheumatoid, severely involved, approach to, *1984*: April, **369–380**
surgical treatment of, *1984*: April, 371–379
rheumatoid deformities of, *1984*: April, 369–371
SLAC. See *SLAC wrist*.
symposium on, *1984*: April, **183–391**
trauma to, nerve injuries associated with, *1984*: April, **279–287**

Z-plasty, for scar tissue, on hand, *1983*: Oct., 739